THE FARMERS' CABINET,

AND

AMERICAN HERD-BOOK.

DEVOTED TO

AGRICULTURE, HORTICULTURE, AND RURAL AND DOMESTIC AFFAIRS.

Perfect Agriculture is the true foundation of all trade and industry.—Liebig.

Vol. VIII.—No. 5.] 12th mo. (December) 15th, 1843. [Whole No. 107.

PUBLISHED MONTHLY,

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PHILADELPHIA.

Price one dollar per year.—For conditions see last page.

Disease of the Plum Tree.

There is scarcely any subject in which the farmers of our own vicinity are more immediately interested, than that of fruit. The value and profitableness of the article,—the diseases and enemies to which the trees are exposed, and consequently, the great precariousness of the crop, all combine to direct our attention to our fruit trees, whether in the garden or the orchard. The remark may be made in passing, that within the last few months, it has been suggested in some of the agricultural journals, that it might be better to leave the peach orchard unploughed—to get it in grass, rather than to cultivate it! This we believe to be a very serious error, and if followed out, our own experience and observation leave us no room to doubt that it will prove ruinous. Our successful Jersey peach growers, esteem it as necessary to keep a peach orchard under the plough, as they do to tend their corn-field.

In the second number of this volume, an article was given on the diseases of the pear tree—in our last, we gave one on those of the apple tree—below, will be found some observations of similar character, in relation to the plum tree. We are indebted for them all to Dr. Harris' work on the Insects of New England, which are injurious to vegetation.—Ed.

Speaking of the insect so mischievous among our plums, Dr. Harris says:—"These beetles begin to sting the plums as soon as the fruit is set, and, as some say, continue their operations till the first of August. After making a suitable puncture with their snouts, they lay one egg in each plum thus stung, and go over the fruit on the tree, in this way, till their store is exhausted; so that, where these beetles abound, not a plum will escape being punctured. The irritation arising from these punctures, and from the gnawings of the grubs after they are hatched, causes the young fruit to become gummy, diseased, and finally to drop before it is ripe. Meanwhile the grub comes to its growth, and, immediately after the fruit falls, burrows into the ground. This may occur at various times, between the middle of June and of August; and, in the space of a little more than three weeks afterwards, the insect completes its transformations, and comes out of the ground in the beetle form. The history of the insect, thus far, is the result of my own observations; the remainder rests on the testimony of other persons.

"In an account of the plum-weevil, by Dr. James Tilton, of Wilmington, Delaware, published in Mease's 'Domestic Encyclopædia,' under the article *Fruit*, and since republished in the 'Georgical Papers for 1809,' of the Massachusetts Agricultural Society, and in other works, it is stated that peaches, nectarines, apples, pears, quinces, and cherries, are also attacked by this insect, and that it remains in the earth, in the form of a grub, during the winter, ready to be ma-

tured into a beetle as the spring advances. These statements I have not yet been able to confirm. It seems, however, to have been fully ascertained by Professor Peck, Mr. Say, and others, in whose accuracy full confidence may be placed, that this same weevil attacks all our common stone-fruits, such as plums, peaches, nectarines, apricots, and cherries; Dr. Burnett has recently assured me, that he has seen this beetle puncturing apples; and it is not at all improbable, that the transformations of some of the grubs may be retarded till the winter has passed, analogous cases being of frequent occurrence. Those that are sometimes found in apples, must not be mistaken for the more common apple-worms, which are not the larvæ of a weevil. The Rev. F. V. Melsheimer remarks in his Catalogue, that this insect lives under the bark of the peach tree. Professor Peck raised the same beetle from a grub found in the warty excrescence of a cherry tree, and from this circumstance, named it *Rhynchænus Cerasi*, the cherry-weevil. The plum, still more than the cherry tree, is subject to a disease of the small limbs, which shows itself in the form of large irregular warts, of a black colour, as if charred. Grubs, apparently the same as those that are found in plums, have often been detected in these warts, which are now generally supposed to be produced by the punctures of the beetles, and the residence of the grubs. Professor Peck says, that 'the seat of the disease is in the bark. The sap is diverted from its regular course, and is absorbed entirely by the bark, which is very much increased in thickness; the cuticle bursts, the swelling becomes irregular, and is formed into black lumps, with a cracked, uneven, granulated surface. The wood, besides being deprived of its nutriment, is very much compressed, and the branch above the tumor perishes.'* The grubs found by Professor Peck in the tumors of the cherry tree, went into the ground on the 6th of July, and on the 30th of the same month, or twenty-four days from their leaving the bark, the perfect insects began to rise, and were soon ready to deposit their eggs in healthy branches.

"In order to account for the occurrence of these insects, both in the fruit and in the branches of the trees, I have ventured, on another occasion, to give the following explanation, although it rests only upon conjecture. The final transformation of the grubs, living in the fruit, appears to take place at various times during the latter part of summer and the beginning of autumn, when the weevil, finding no young fruit, is probably obliged to lay its eggs in the small branches. The larvæ or grubs from these eggs, live in the branches during the winter, and are not perfected till near the last of the following June. Should the fall of the fruit occur late in the autumn, the development of the beetles will be retarded till the next spring; and this I suppose to be the origin of the brood which stings the fruit. These suggestions seem to receive some confirmation from the known habits of the copper-coloured plum-weevils of Europe, which, 'in default of plums, make use of the soft spring shoots of the plum and apricot trees.'—(Koller's Treatise, p. 238.) In cases like these, we see the care of the Creator for some of the least of his creatures, which He has wisely provided with variable instincts, enabling them to accommodate themselves to the difficulties of the situation in which they may happen to be placed, and thus, even in unfruitful seasons, to provide for a succession of their kind.

"The following, among other remedies that have been suggested, may be found useful in checking the ravages of the plum-weevil. Let the trees be briskly shaken or suddenly jarred every morning and evening, during the time that the insects appear in the beetle form, and are engaged in laying their eggs. When thus disturbed, they contract their legs and fall, and, as they do not immediately attempt to fly or crawl away, they may be caught in a sheet spread under the tree, from which they should be gathered into a large wide-mouthed bottle or other tight vessel, and be thrown into the fire. All the fallen wormy plums should be immediately gathered, and, after they are boiled or steamed, to kill the enclosed grubs, they may be given as food to swine. The diseased excrescences should be cut and burned every year before the last of June. The moose plum-tree, *Prunus Americana*, which grows wild in Maine, seems to escape the attacks of insects, for no warts are found upon it, even when growing in the immediate vicinity of diseased foreign trees. It would, therefore, be the best of stocks for budding or engrafting upon. It can easily be raised from the stone, and grows rapidly, but does not attain a great size."

* See Professor Peck's account of Insects which affect Oaks and Cherry trees; with a plate; in the "Massachusett's Agricultural Repository and Journal." Vol. V. p. 312.

Duvilard has calculated that the introduction of vaccination by Jenner, has increased the average length of life to the human population, by three years.—*Cambridge Miscellany, Oct.*, 1843;—*p.* 123.

Deep Ploughing.

Deep Ploughing differs from ordinary and subsoil ploughing, in this—that its special object is to bring to the surface, and to mix with the upper soil, a portion of that which has lain long at a considerable depth, and has been more or less undisturbed.

The benefit of such an admixture of fresh soil, is in many localities undoubted, while in others, the practical farmer is decidedly opposed to it. On what principle does its beneficial action depend, and in what circumstances is it likely to be attended with disadvantage?

1. It is known that, when a heavy shower of rain falls, it sinks into the soil, and carries down with it such readily soluble substance as it meets with on the surface. But other substances, also, which are more sparingly soluble, slowly and gradually find their way into the subsoil, and there more or less permanently remain. Among these may be reckoned gypsum, and especially those silicates of potash and soda, so useful to grain-bearing plants. Such substances as these, naturally accumulate beyond the reach of the ordinary plough. Insoluble substances likewise slowly sink. This is well known to be the case with lime, when laid upon or ploughed into land. So it is with clay, when mixed with a surface soil of sand or peat. They all descend till they get beyond the reach of the common plough. Thus it happens that after the surface soil becomes exhausted of one or other of these inorganic compounds, which the crops require, an ample supply of it may still be present in the subsoil, though, until turned up, unavailable for the promotion of vegetable growth.

There can be little question, I think, that the greater success which attends the introduction of new implements in the hands of better instructed men, upon farms long held in arable culture, is to be ascribed in part to this cause. One tenant, during a long lease, has been in the habit of ploughing to a depth of three, or at most, perhaps, four inches—and from this surface the crops he has planted, have derived their chief supplies of inorganic food. He has limed his land in the customary manner, and has laid upon it all the manure he could raise, but his crops have been usually indifferent, and he considers the land of comparatively little value. But another tenant comes, and with better implements turns up the land to a depth of seven or eight inches. He thus brings to the surface the lime and the accumulated manures, which have *naturally* sunk, and which his predecessor had permitted year after year, to bury themselves in his subsoil. He thus has a new, often a rich, and almost always a virgin soil to work upon—one which, from being long buried, may require a winter's exposure and mellowing in the air, but which, in most cases, is sure to repay him for any extra cost.

Again, it is known that some districts, for reasons perhaps not well understood, are more infested than others, with insects that attack the corn or other crops. These insects, their eggs, or their larvæ, generally bury themselves in the undisturbed soil, immediately beyond the ordinary reach of the plough. If they remain wholly undisturbed during the preparation of the soil, some species remain in a dormant state, and the subsequent crop may, in a great measure, escape. Plough the land deeper than usual, and you bring them all to the surface. Do this in the autumn, and leave your land unsown, and the frost of winter may kill the greater part, so that the crops may thereafter grow in safety. But let this deep ploughing be done in the spring, and you bring all these insects within the reach of the early sun, and thus call them to life in such numbers, as almost to insure the destruction of your coming crops.—*Johnston's Lectures.*

For the Farmers' Cabinet.

Cultivation of the Strawberry.

Every lover of the strawberry feels interested in its cultivation, and should be disposed to throw into common stock whatever information he may obtain, that will be likely to increase the supply of this delightful fruit. The following observations of Dr. Bayne, a successful horticulturist of Alexandria, D. C., I find in a late number of Hovey's Magazine, published at Boston, and I take the liberty of sending them for publication in the Cabinet, believing that many of your subscribers, particularly such as are in the neighbourhood of large cities, where the fruit always commands a high price, would find their interest promoted by giving more attention to their strawberry plantations.

The editor of the Magazine, appends some remarks of his own to the Doctor's letter, which I also send. With respect to the mooted point of male and female flowers, I am willing to leave it to be settled by amateurs. For myself, were I to make a plantation of strawberry vines, I would think it safest to attend to the sexual character of the plants. It would at any rate, cost but little trouble, and might insure the productiveness of my bed. U.

Philadelphia, December 4th, 1843.

"This plant will adapt itself to almost any soil of moderate fertility, but delights more particularly in a deep loam. For the reception of the plants, select a loamy or sandy soil; spade in a thick layer of strong unfermented manure, and thoroughly pulverize the earth; mark off the ground by a line in rows three feet asunder, then select the strongest plants; set them twelve inches from plant to plant, in the rows. Permit the runners to take entire possession of every alternate space; observing to eradicate weeds and grass throughout the spring, summer and fall.

"The runners from the other space, must be carefully destroyed throughout this time By this arrangement of the plants, you will have your patch in beds three feet wide, leaving a vacant space or alley three feet wide for the gatherers to walk on. After the fruit season is over, the alleys or spaces unoccupied by plants, may now be thoroughly worked for the reception of bearing plants for the next year. The plants of the previous year, must be spaded under, taking care to leave sufficient plants in the original rows for the production of bearing vines for the next crop. By this simple mode of reversing the beds, a patch upon the same ground may be continued productive for several years.

"*Another plan.*—To produce strawberries of extraordinary size for exhibition, I would recommend the following preparation: select the best soil and trench it at least two feet deep; incorporate well with the first twelve inches, an abundance of strong undecomposed manure; pulverize and rake the ground well, then mark off the rows twelve or fifteen inches asunder, and set the plants in the rows from twelve to fifteen inches, according to the luxuriance and vigor of the variety. During the first year, the runners must be carefully and frequently destroyed, before they become rooted. By this means the stools become very vigorous, and bear the most abundant crops. In the spring, after the fruit is set, place around each plant a small quantity of straw, or what is much better, cover the whole surface of the ground one inch thick with wheat chaff. This prevents evaporation, protects the fruit from the earth, improves the flavour, and will greatly increase the size.

"After the above directions, to insure success, it will be necessary to procure the finest and most productive varieties. I would recommend Hovey's Seedling, Female Hudson Bay, Large Lima, Bishop's Orange, Bayne's Prolific, as being splendid varieties and exceedingly productive. I believe every flower on the above varieties are female, and if planted separately, will fail to yield abundantly; but if planted in proximity with the Melon or Southborough Seedling, every flower will be impregnated and will produce enormous crops. John H. Bayne.

"October, 1843.

"We believe it is now the generally received opinion of all intelligent cultivators," says the editor of the Magazine, "that there is no necessity of making any distinction in regard to the sexual character of the plants, when forming new beds. The idea of male and female flowers, first originated, we believe, by Mr. Longworth, of Ohio, is now considered as exploded; at least, so far as we have been able to learn, since the subject was agitated in our pages of last season,—as well as from our own experience,—such is the opinion expressed by those who have cultivated the strawberry to much extent.

"We were at first induced to think the theory of Mr. Longworth one of some truth, from the fact, that a bed of our seedling variety accidentally failed to produce a crop, when at some distance from any other kind, and as we knew there could be no harm in planting some other sort, with large prominent stamens, in near proximity, we recommended that method in our article, annexed to Mr. Longworth's communication,—Vol. VIII., p. 259.—not because we considered his theory as founded in truth, but from the circumstance that it appeared plausible, and until the true cause of the occasional barrenness of beds could be accounted for, this would be a prevention of the loss of a crop. By reference to our Retrospective view of Horticulture, for 1842, in our January number, it will be seen that we there stated.—p. 4,—that much information had been elicited, in relation to the '*sterile* and *fertile* character of several of the larger kinds of strawberries,' but that the question in relation to the true cause of barrenness, had not yet been 'satisfactorily settled.' Since then, additional information has come to our knowledge, which seems, as we have already observed, wholly to explode the idea of separate sexes in the flowers of the strawberry.

"That there may be *fertile* and *sterile* beds of strawberries, is not denied; but the cause of their sterile character is to be sought, not in a naturally defective organization of the blossom, but rather in the mode of cultivation applied to the plants. It is well known that all flowers have a tendency to become double, and when this takes place, it is also known that the stamens are transformed into petals. Now somewhat such a change undoubtedly takes place in the strawberry, when under a high

state of cultivation, or forced by too much nourishment to extend its runners too far. Repletion is fatal to the perfection of the blossom, though it may produce apparently vigorous growth.

"Many kinds of strawberries have a greater tendency to extend their runners than others; this excessive running often debilitates the old plants, and a great portion of the young plants, especially those most distant from the parent stock, are too weak to form new plantations; yet in most instances they are taken without discrimination, and especially when a new and valuable variety is obtained, and the desire is to increase it as speedily as possible, every encouragement is given to extend the young runners. These, when planted out in new beds, and then again forced on by large supplies of manure, are so far removed from a natural state, that sterility is the almost inevitable result. Disappointed in the produce of the fruit, the cultivator either neglects his bed or destroys it, and without further trial, gives up the variety as worthless. Precisely such has been the management of many beds of our seedling; and we know of repeated instances where the beds of *last year*, owing to their entire unproductiveness, were given up as unworthy of any care, which the past season produced immense crops, though overrun with weeds, and this, too, without being in the vicinity of any other kind. Many such experiments have proved, conclusively, that cultivation alone creates *sterile* or *fertile* plants.

"In conclusion, we think we may safely aver, that there is not the least necessity of cultivating any one strawberry near another to ensure the fertility of the plants, *provided* they are under a proper state of cultivation. But if it be that the plants, by a..y mode of growth, are rendered defect ve in the blossom, then the proximity of some other variety will certainly ensure a crop. Those cultivators, therefore, who wish to guard against any emergency, may plant their beds of such sorts as have a tendency to become *sterile*, in the vicinity of the Old Virginia. Wherever the strawberry is cultivated, a small spot of ground is generally selected for the purpose, and as the Old Virginia is one of the earliest as well as best sorts, those who would have no anxiety about a sure crop, may plant a bed of this kind near their large sorts. No neglect of cultivation will then fail to ensure an abundant supply of fruit.

"We are now instituting a course of experiments in connexion with this subject, and hope to give our readers the result in the course of another year."

DIVERSITY OF CLIMATE AND SEASONS.—The Albany Argus, after collecting many instances of the weather in different parts of the Union, in regard to dryness and moisture, remarks:—"According to the usual laws of nature, it is impossible for a drought to pervade our whole country. Neither can we readily have a famine as long as the cultivation of the soil is attended to. Local and partial scarcity may prevail, but what is the loss of one section, is frequently the gain of some more fortunate section. When the North is parched with drought, the West or the South, is rejoicing in fertilizing rains. When the summer is cool in New York and New England, it is frequently the warmer and more genial in Michigan, Wisconsin, or Ohio; and even a drought which would burn all vegetation to a crisp here, does not exhaust the crop-growing energies of the black muck of the Western prairies, or the woodlands. Their new and virgin soil is comparatively more independent of the dews and rains of heaven. This is the reason why the Great West presents so inviting a field to the thrifty, calculating, and industrious farmer. He can place more reliance upon the intrinsic qualities of the soil and upon his own exertions, and seems less dependent for a return upon the uncertain events of rain and sun.

"We have known wheat to ripen on the Western prairies, in such cloudy weather as would, in the Eastern States, on our thin and comparatively impoverished soil, give no fullness to the berry—the exceeding richness and natural warmth of the Western soil, in a measure supplying the absence of a warm and ripening sun."

MAXIMS OF BISHOP MIDDLETON.—Persevere against discouragement. Keep your temper. Employ leisure in study, and always have some work in hand. Be punctual and methodical in business, and never procrastinate. Never be in a hurry. Preserve self-possession, and do not be outtalked of conviction. Rise early, and be an economist of time. Maintain dignity, without the appearance of pride; manner is something with every body, and every thing with some. Be guarded in discourse—attentive, and slow to speak. Never acquiesce in immoral or pernicious opinions. Be not forward to assign reasons to those who have no right to ask. Rather set, than follow examples. Practice strict temperance; and *in all your transactions remember the final account.—Common School Journal.*

PATIENT industry accomplishes wonders. A little done daily makes much in a year.

Tobacco.

The following account of the first introduction of this article into England, we find in a note to an interesting historical article by Dr. Wm. Bacon Stephens, in the last number of the Magnolia, entitled "*The First English Voyage to Virginia.*" This voyage, merely exploratory, was made in 1584, by Captains Amadus and Barlow, at the charge and under the auspices of Sir Walter Raleigh.

Anderson, in his "History of Commerce," and Oldmixon, say they took home with them some tobacco, the first that was ever seen in England. But this is erroneous, as in Stow's Chronicle, it is stated that Sir John Hawkins carried it thither in the year 1565, but it was then considered as a mere drug, and the Chronicle tells us, "all men wondered what it meant." This account of Stow, is confirmed by Hakiuyt, who, in his narrative of the voyage of Sir John Hawkins, in 1565, thus speaks of the article as observed by that navigator among the Floridian Indians. "The Floridians, when they travel, have a kind of herb dried, which, with a cane, and an earthen cup in the end, with fire, and the dried herbs put together, do suck through the cane the smoke thereof, which smoke satisfieth their hunger." Hawkins probably carried a specimen of it to England, as a curiosity.

Camden and other authorities, however, assert that tobacco was first taken to England by Ralph Lane, Governor of the Virginia adventurers, in 1586. That the colonists at that time, learned the use of this narcotic, is evident from what Mr. Hariot, "a man of science and observation," who accompanied Mr. Lane, says: "The Indians," he writes, "used to take the fume, or smoke thereof, by sucking it through pipes made of clay. We, ourselves, during the time we were there, used to suck it after their manner, as also since our return." The interest and example of Sir Walter Raleigh, "a man of gaiety and fashion," soon brought it into such vogue at court, says Stith, that many great ladies, as well as noblemen, made no scruple to take a pipe.

We are not informed whether the Queen herself made use of it, but it is certain she gave great countenance and encouragement to it, as a vegetable of singular strength and power, which might therefore prove of benefit to mankind and advantage to the nation. So far, as Mr. Oldys well observes, was this wise princess from the refined taste of her successor, who held tobacco in such abomination, that he not only refused the use of it himself, but endeavoured to destroy and suppress it among his subjects, and would thereby have robbed the crown of what has since proved one of its noblest jewels and most considerable revenues, and the nation of a very advantageous and important branch of trade. Sir Walter Raleigh's tobacco box, with some of his pipes, was lately extant, and laid up among the rarities in the museum of that curious antiquarian, the late Mr. Ralph Thornesby, of Leeds, in Yorkshire.

There are also some humorous stories still remembered concerning the first use of tobacco; particularly his wager with the Queen, that he would determine exactly the weight of the smoke that went off in a pipe of tobacco. This he did by first weighing the tobacco, and then carefully preserving and weighing the ashes, and the Queen readily granted that what was wanting in prime weight, must be evaporated in smoke, and when she paid the wager, she said pleasantly, that she had heard of many labourers in the fire who had turned their gold into smoke, but Raleigh was the first who had turned his smoke into gold.

It was also related, that a country servant of his bringing him a tankard of ale and nutmeg into his study, as he was intently engaged at his book, smoking a pipe of tobacco, the fellow was so frightened at seeing the smoke reek out of his mouth, that he threw the ale into his face, in order to extinguish the fire, and ran down stairs alarming the family, and crying out his master was on fire, and before they could get up, would be burnt to ashes.

"Certainly," says Camden, "from that time forward, it began to grow into great request, and to be sold at an high rate. It is remarkable, that in all our early accounts of the American aborigines, we find the use of tobacco specified. Carter, in 1535, found it in Canada, and thus describes it: 'There groweth a certain kind of herb, whereof in summer they make great provision for all the year, making great account of it, and only men use of it. And first they cause it to be dried in the sun, then wear it about their neck, wrapped in a little beast's skin made like a little bag, with a hollow piece of stone, or wood, like a pipe; when they please, they make powder of it, and then put it in one end of said cornet or pipe, and laying a coal of fire upon it, at the other end suck so long, that they fill their bodies full of smoke, till that it cometh out of their mouth and nostrils, even as out of the tunnel of a chimney.'"

Brereton, in his Journal of Gosnold's Voyage, in 1602, and Rosier, in his account of Weymouth's Voyage to New England, in

1605, both speak of its use among the Indians of those parts. But in this case it was not smoking, or chewing, or snuffing, but *drinking*. "They gave us, also," says Brereton, "of their tobacco, which they *drink* green, but dried into powder, very strong and pleasant." "We *drank* of their excellent tobacco," writes Rosier, "as much as we would with them; but we saw not any great quantity to truck for, and it seemed they had not much left of old, for they spend a great quantity yearly, by their continual drinking."

Lane found it among the Virginians; Hawkins among the Floridians, and the Spaniards among the Mexicans, "where the natives took it not only in smoke at the mouth, but also in snuff at the nose; and it was such a luxury with them, that the lords of Mexico composed themselves to sleep with it." "Its name," says Anderson, "was probably given it by the Spaniards before this time, from the isle of Tobago, one of the Caribbees, where it was produced in abundance."—*U. S. Gazette.*

Peach Tree Protector.

To the Editor of the Farmer's Cabinet,—I doubt not you will agree with me, that the space which it will occupy to publish the enclosed extract of a letter I received some time since, from that indefatigable student and promoter of good and useful things, *Doctor G. B. Smith*, of Baltimore, will be well and profitably employed. In placing it at your service, I have no object but to promote the growth of one of our most valuable and delicious table fruits, the rearing of which, is surrounded with so many difficulties—and in respect of the culture of which, on some radical points, such strange and wide differences of opinion and practice prevail.

Yours, with best wishes,

I. S. S.

Washington, October 5th, 1843.

"*A few words about the preservation of peach trees.*—I do not know that I can say any thing new or of much value on this subject; but what I am about to say, may at least draw attention to it. It is known to all, that the peach tree is rapidly declining in this country; and that this decline is attributed in a great degree, to the ravages of the peach worm, the *Ægeria exitiosa* of naturalists. Various remedies have been suggested for this evil; but few of them have been tried, and those few by very few individuals; the evil therefore prevails,—has increased, and is daily increasing. There is no reason why peach trees should not be as long lived as any other fruit trees, except their exposure to *this* enemy. I say *this* enemy; for it is believed that the worm causes nearly, if not quite, all the diseases to which the tree is liable. It is certain, at all events, that when the tree has been perfectly protected in the manner I am about to state, from the attacks of the worm, it has not suffered from other diseases. The remedy I am about to propose, may at first glance, appear troublesome and expensive,—for it will cost 12½ to 25 cents, for each tree, and require probably ten to twenty minutes, in its application; and when once applied, it will last eight to ten years. That it will more than pay for all this, in the increased quantity of fruit the tree will bear the first year, I have no doubt. I will state one more fact, before I describe this remedy. It has been tried by the inventor of it for five years, during all which time it has proved perfectly successful. The remedy is this: Take a piece of sheet zinc, of the thinnest kind, ten inches high, and wide enough to fit the tree, and cut it so that it will surround the body of the tree completely, the edges approaching within an eighth of an inch on one side; place this on the tree, sinking the lower end an inch or two below the surface of the ground, and making the upper end fit closely to the body of the tree; then drive a small tack through the centre of it, close to the edge at the top, merely to keep it in its place. Then prepare another piece of zinc, exactly of the same shape and size as the first, and put it on over the first, but bring its edges together on the side opposite to that of the edges of the other, and drive a small tack through the top of it into the tree, as before. It will be observed, that the tack of the last piece of zinc, must pass between the edges of the first. The object, it will be perceived, is to allow of the expansion of the plates of zinc as the tree grows, without uncovering any part of the tree. I do not know that this description will be understood. Any body, however, can explain it to himself, by taking a sheet of paper, placing it around the tree, and thus forming a pattern. The operation of the remedy is very simple; it protects the tree mechanically and most effectually from the attacks of the worm. It is of course known to all, that the fly, the parent of the peach worm,—a large, bluish-black, wasp-looking fly—seeks the tender bark of the peach tree at the surface of the ground, as the place to deposit her eggs; and if you protect this part of the tree from her oviposiiter, you protect your tree from the depredations of her progeny. It is true, that dis-

appointed in finding a place at the ground, the fly sometimes finds a soft place in the forks, at the junction of the branches and body, but these are so few and their depredations so limited, that little attention is paid to them.

"It has been suggested that the zinc plates thus applied, might possibly possess some other sanative power over the peach tree, besides that of its mechanical protection—some *galvanic* influence, possibly caused by the contact of the two metals, the zinc of the plates and the iron of the tacks. Be that as it may, certainly there never were more healthy trees than those that have been wearing these plates for the last five years. The inventor of this remedy assures me, that he considers the extra quantity of fruit produced every year, by means of these plates, to have far more than paid for the application of them."

Unruly Milkers.

Does your cow kick? Do not fly into a passion and pound her with a handspike, or trim her with a gad or a cow-hide, or vent your spite in kicking her in turn. You will only spill a great deal of vengeance uselessly; causing great wear and tear of temper; make yourself feel very foolish when you get over it, and set a bad example to your children; while your cow, in seventy cases out of seventy one, will kick as bad as before, or worse. If she is a heifer, you will infallibly teach her to kick; as her kicking, in the first instance, was from pain, or fright, or some such cause, of which she would be cured by simply paying no attention to it. A heifer never kicks from *principle*. If she is an old cow, your thrashing will generally be worse than thrown away. Just keep philosophical, and try other means. Make a pen of just such size that the cow can comfortably stand in it, and no more. This you can do in the corner of your yard, by setting down three posts, and boarding them up fence-like, leaving it open at the end to drive in the cow. Let a space be left open at the side where you wish to milk. Put your cow into it and fasten her in by stretching a chain across the end of the pen behind her. Then take a piece of rope, say 15 feet long, and tie one end of it to a post behind the cow, and near its length distant from her; tie the other end to the leg of the animal, just above her foot, drawing it back as much as it would naturally be, for her to be milked. Then sit down and milk the cow at your leisure. It will take a man half an hour perhaps, to make the pen; and when once made, it is very little more trouble than to milk without. She may object to going into it once or twice, but will afterwards give no trouble.

This we recommend only however, when a man has an animal, valuable otherwise, which *will* kick, and which he wishes to keep. A poor cow that will kick, is too great a nuisance to think of keeping at all. If you are afflicted with a kicking cow, try it; and you will not regret it.—*Prairie Farmer.*

Machine for weighing and assorting Coin.

Mr. Cotton, who is governor of the Bank of England, has invented this machine for the purpose of weighing sovereigns, and separating the light ones from those of standard weight. It is so delicate, that it detects with precision, a variation of a twelve thousand two hundred and fiftieth part of the weight of a sovereign. The coins are placed in a tube, or hopper, whence they are carried on to a small platform, which is suspended over a delicately poised beam, to the other end of which is appended the standard mint weight. On setting the machine at work, a sovereign is placed on a platform, and if it is full weight, a small tongue advances and strikes it off into a till appointed to receive it: but if it is light, the platform sinks, and brings it within the reach of another tongue, at a lower level, which advances at right angles to the former tongue, and pushes the coin into another till. Other coins succeed in rapid rotation, so that the machine can weigh and sort 10,000 sovereigns in six hours, while an experienced teller, can, at the utmost, only weigh between 3,000 and 4,000 coins by hand scales, in the same time, and even then, the optic nerve by incessant straining, becomes fatigued, and errors occur.—*Journal of Franklin Institute.*

Whenever the farmer or planter discovers his fields covered with *sheep sorrel*, he may conclude that the soil needs *liming*, the presence of the sorrel being unerring evidence of the absence of calcareous matter, and that the soil is too acid for the purposes of healthful vegetation.—*Farmer's Monthly Visitor.*

To Clean Kid Gloves.—"Take a piece of flannel, moisten it with a little milk, rub it on a cake of nice hard soap, and then apply it to the soiled part of the glove. As soon as you have removed the dirt, rub the spot with a dry piece of flannel. Care must be taken not to make the glove too wet."

For the Farmers' Cabinet.

Hereford Cattle.

Mr. Editor,—A friend has forwarded me your last paper, that I might peruse a letter from Mr. Thomas Thompson, Prospect Farm. I have read it carefully, but do not see any thing to the point; and I am at a loss how to take it, whether intended as a *compliment* or a *sneer* for me. I like to see a man flourish his pen without fear, and tell *plainly* what he means, and not *insinuate*.

Can Mr. T. point out to me one breeder in Herefordshire, that gives his calves new milk from two cows? if not, he has no right to assert this; *hear-say* is no *proof*. If he is a descendant of Messrs. Randall & Hepburn, &c., and has read *Youatt*, that is no foundation to rest such an assertion upon. Youatt is no guide for a practical man. I can name two breeders in this State, who have said it, and I know one of them will say so publicly. Nor do I believe he can maintain that *Herefordshire* calves have new milk in any way, except when fed for the butcher.

Again—he says linseed jelly will make a larger, better, fatter calf, than any thing else. I know this assertion is not made from *practice*, and I will leave him to prove it by *trial;* he cannot give a young calf beyond a limited quantity; it will do more harm than good; and that limit is not equal to new milk—let Mr. T. try it, and then state his experience.

The only bull calf I saved, I let run with the cow, and he came to house *fat;* but my heifers and steers came thin; they neither had *jelly* nor milk, after the 1st of June, nor shall they have a particle of meal of any description, if I know it. I decline feeding high for breeding stock, altogether; if a calf is forced, that forcing must be continued, and I know it will not pay. I know many breeders who have ruined their stock from high keeping, and then are at a loss to tell the public the true cause. My feed this winter, will be ruta-baga and hay, the best feed of any other, for calves.

I suppose Mr. T. alludes to Mr. Rhodes, of Islington, for his 1000 milkers; and to Mr. Laycock, of the same place, for his 700. If so, he is mistaken. I have frequently examined both herds. They are not *Short-horns:* they are what are called in England, *old fashioned Durhams*, or Yorkshires. I did not see one of the Improved Short-horns or Herd Book animals, in either herd.

I will grant the old fashioned Durham is the best breed for city milking establishments; they give a great quantity, but inferior quality, except in a few instances; and when they give *quality*, they are *truly extraordinary;* nor do they want any "milk and water" letters to puff them: they however, consume a great quantity of food over a Hereford. To contend with this breed, I want allowance made for food, each having it weighed to them. The *Improved Short-horns*, although great consumers, I ask nothing for; they may stand side by side, and both be fed alike, although I consider less feed a very prominent item. And I agree with Mr. Bates, of Kirkleavington, that there are but very few of the *best* Short-horns. The Yorkshires are abundant, and there are good and bad of that breed as well as of every other. I took it for granted, that every *reasonable man* would make the allowance for my "young things."

I have but four yearling heifers, and I will show three of them at three years old, against Mr. T. or his *reporter's Short-horns*, for milking, symmetry, and quality, separately or collectively. Mr. T. may call this *boasting*, but I call it *right principle*. I will not boast of beating, if the challenge is not accepted. *I want a fair trial.* And I repeat for the Cabinet, what I have done for the Agriculturist and Cultivator; that I will show from six to ten breeding cows, and a bull, all *pure Herefords*, against a similar number of *any breed* in the United States, for beauty, symmetry, quality, milking, and activity for breeding working oxen, for a premium of a silver tankard, value $50, and meet the acceptor half way. This may be deemed *boasting:* I do it to *defend*, and not to *brag*, and I say it is the only means of arriving at *trusty* knowledge. I shall name my judge; my opponent may have the choice of the other two, if he is disposed.

I have no fears in relation to profit from *native* cattle. What I should call *boasting*, would be for a man to boast of having beaten twelve three-year olds, with twelve aged, tried cows: when I do this, you may call me a *brag*. I like bold assertions well maintained; and I want to come to trial with the Short-horns. You may hear from me again if you wish it.

Wm. H. Sotham.

Hereford Hall, near Albany,
Nov. 20th, 1843.

Lime spots on woollen clothes, may be completely removed by strong vinegar. The vinegar effectually neutralizes the lime, but does not generally affect the colour of the cloth. Dark cloth, the colour of which has been completely destroyed in spots six inches square, has thus had its original colour completely restored.

On the Preparation and Use of Manures.

BY WILLIS GAYLORD, OF OTISCO, N. Y.

[Continued from page 95, last No.]

Pond Mud.—Pond mud, although not as rich in vegetable matter or humus, as swamp muck or peat, is still one of the most valuable of fertilizers. The quantity of earthy matters it contains, is rather an advantage than otherwise, when applied to light or sandy soils, and will rarely be found injurious on any. As a manure, the action of pond mud is more immediate than that of unfermented muck, owing to the much greater proportion of salts and silicates it contains. It is astonishing what quantities of this manure are lying worse than useless, in the thousands of mill-ponds in our country. In the winter of 1839–40, Mr. Whalen, of Saratoga county, drew from a pond on the Kayaderosseras creek, 1000 loads of pond muck, and put it on a field of 17 acres; soil light and sandy, or gravelly, and reduced by *skinning*, until it would produce nothing but sorrel and mullein. This field, planted to corn, gave him 850 bushels. The extra product from the use of this manure, he estimated at 20 bushels per acre. In the winter of 1840–41, he took from the same pond 700 loads, and applied it to two other fields, and with similar results. Mr. Whalen has also, at different times, drawn 800 loads of muck from an ash swale, and found it nearly or quite to equal in its effect on vegetation, the pond mud. After the corn, Mr. Whalen has uniformly grown oats; and on these worn out lands, where he formerly would have lost his seed oats, as well as the grass seeds used, he has been successful, both taking well where the mud or muck had been used. For heavy loams or clay, Mr. Whalen is of the opinion that a mixture of lime or yard manure, with the muck or mud, would be indispensable. This mixture, the experience of Mr. Clark, of Northampton and others, shows, is well effected by placing the muck in the cattle yards or pig styes, to be incorporated with the manures by the feet or noses of the animals, and to act as absorbents of the urine and soluble matters that are too frequently lost.

Night soil.—Night soil, or the contents of privies, is one of the most powerful and valuable of manures; but prejudices, combined with the difficulties formerly attending its use, have prevented much attention to it in England or the United States, until within a few years. In consequence, a substance of the greatest importance to the farmer has been regarded as a nuisance, and, in the vicinity of large cities, has truly been so. Now, since science has taught the mode of preparing it for use, its use is becoming general, and its value fully appreciated. According to the analysis of manures, made by Boussingault and by Dr. Dana, there is no manure ordinarily accessible to the farmer, so rich in the carbonates or salts of ammonia as this. This will be seen by comparing it with horse dung, the value of which is well understood.

	Horse manure.	Night soil.
Geine, ...	27.	23.
Salts, ...	.96	1.2
Carbonate of ammonia,	3.24	15.32

Hog Dung.—The dung of the fattening hog approaches night soil in value, more nearly than any other; indeed Dr. Dana supposes that for all the purposes of analysis, these may be arranged under one head. In practical use, Von Thaer, on the Prussian government farm, determined by experiment its comparative value as follows: If a soil without manure, would yield three bushels of produce for one sown, manured with different substances, the result was,

Without manure, ...	3 for 1 sown.
With cow dung, ...	7 " 1 "
With horse dung, ...	10 " 1 "
With night soil, ...	14 " 1 "

Comparative value of night soil.—In some experiments made by Arthur Young, and detailed in the Annals of Agriculture, the effect of this manure on wheat, was as follows:

Simple soil, per acre, ...		12¼ bushels.
Bushels of night soil, ...	320	37¼ "
" "	240	32¼ "
" "	160	31¼ "
Cubic yds. of farm-yard compost,	60	25 "
" " "	30	23¾ "
30 do. and 1 cubic yard of chalk,		25 "

Applied to potatoes, the results were not less decisive:

Simple soil produced per acre,	120 bushels.
Night soil, 10 wagon loads, ...	600 "
Bones, 10 "	650 "
Hog dung, 60 one-horse cart loads,	480 "
Yard compost, 60 one-horse cart loads,	300 "

Poudrette.—The most common method of using night soil, or at least that in which it is most portable and least offensive, is to convert it into poudrette. This is done to the best advantage in large manufactories; and hence they are usually established in the vicinity of large cities, where the original article is easily obtained. Different processes are adopted, but the most common is slowly to dry the night soil in pans, having previously mixed it with plaster or ground peat. The object in adding plaster or peat, is to prevent the escape of ammonia, on which the value of the manure is mainly depending. The dried mass is then pulver-

ized—is perfectly inodorous, resembles a dry brownish powder, and may be used broad cast or in drills. In Paris, a powerful manure is made, also called poudrette, by boiling the offals of the slaughter-houses into a thick soup, making this into a stiff paste by stirring in coal ashes, then drying and grinding.

Urate.—Urate, is a manure formed from a compound of urine, sand and plaster of Paris. In Paris, where the manufacture is most perfect, the gypsum is burnt previous to using. The value of the urates, as manure, will be better understood from the annexed table:

Water,	65.
Urea,	5.
Bone dust,	5.
Sal ammoniac and muriate of potash,	15.
Sulphate of potash,	5.
Carbonate of potash and ammonia,	5.
	100

From this, it will be seen that urate abounds in those substances most necessary to give fertility to soils. Dr. Dana remarks that a cord of loam, saturated with urine, is equal to a cord of the best rotted dung; and in some experiments made by the French Royal Society of Agriculture, which may be found detailed in the *Dictionnaire d'Agriculture Pratique, Paris*, 1828, for the purpose of comparing it with night soil, pigeon's dung, &c., known to be very effective, the result was in favour of the urate. When mixed with dried night soil or poudrette, its effect on various crops was very great. From the experiments there instituted, it appeared that urate alone acted most favourably in moist seasons. It must be remembered, however, that night soil, when properly prepared, retains all the urine, or rather its fertilizing qualities; and the fact that urine is of itself so valuable a manure, should put farmers on their guard against suffering it to be lost from their stables and yards, as is usually done.

Use of night soil.—Where the farmer is so situated that no poudrette manufactories are within his reach, he will find that by making it into a compost, with swamp muck, ashes, peat or gypsum, he will have a manure that may be easily applied, and which will possess great fertilizing powers. The Chinese have long been celebrated for the extensive use of night soil. Their method is to make it into cakes with a rich marl, which, when dried in the sun, constitute a regular article of traffic, almost a legal tender. The Flemings were the first of the Europeans to make a common use of night soil as a manure, and hence its name of Flemish manure. There it is applied directly, and without preparation, to any crop for which manure is wanted; and the superiority of Flemish agriculture, and the great fertility of their soils, may be, in a great measure, attributed to their careful saving and use of matters which others have been most anxious to be freed from. In Spain, the celebrated asparagus of Saragossa is grown on beds of loose gravel and sand, but a little above the flow of the tide; but these beds are heavily manured, after the cutting of the season is closed, with fresh night soil dug in, and thus their fertility is sustained, and the unrivalled character of the Saragossa asparagus maintained.

Bones.—Bones, ground or crushed, form another powerful manure; and although but little used as yet in this country, there are some indications, such as the erection of mills for crushing them, that their use will soon become extensive, and our farmers be saved the mortifying spectacle, so long witnessed here, of seeing ship loads of bones exported to Europe, used by farmers there, and returned to us in the products of the soil. Col. St. Leger, of Wormsworth, was the first to introduce bone manuring into England, in 1775; but it was many years before their value was fully understood; and it was only in connection with the turnip culture, that they came into general use. The manner in which bones act as manures, and their value, will be best seen by a statement of their constituents. The bones of the ox, according to Berzelius, contain in 100 parts:

Cartilage,	33.3
Phosphate of lime,	55.35
Fluate of lime,	3.
Carbonate of lime,	3.85
Phosphate of magnesia,	2.05
Soda, with a little common salt,	2.45
	100.

The analysis of Fourcroy and Vauquelin, gives:

Gelatine and oil,	51.
Phosphate of lime,	37.7
Carbonate of lime,	10.
Phosphate of magnesia,	1.3
	100.

Johnson, in his lately published work on Fertilizers, says: "Dry bones contain about two-thirds their weight of earthy matter, the other third chiefly of animal matter, resembling glue. Of the earthy matter, five-sixths consist of phosphate of lime and magnesia. A ton of bone dust, contains of

Animal matter, about	746 lbs.
Phosphate of lime, &c.,	1,245 lbs.
Carbonate of lime, &c.,	249 lbs."

Bones, however, vary somewhat in their constituents, some containing more of the

earthy, and others more of the animal parts; take those of the calf and the elk for examples, to which the teeth of the horse are added.

	Phosphate of lime.	Carbonate of lime.	Animal matter.
Calf,	54.		46.
Elk,	90.	1.	9.
Teeth,	85.5	15.5	

Use of bones.—It is evident then, that bones abound in matters capable of producing ammonia. Dr. Dana estimates its power in this respect, to be equal to eight or ten times that of cow dung, while, if the salts are regarded, 100 lbs. of bones contain nearly sixty-six times as much as the same quantity of cow dung. Experience proves that the power of aiding crops, between dung and bones, is about in the proportion of the constituents named. It is evident that much of the value of bones depends on their cartilage. Boiling bones, as generally practiced, has but little effect in extracting the gelatine; and does not remove even all the fat or oil. Under high pressure, as in Papius's digester, the separation of the animal from the earthy matter, is complete. The finer bones can be crushed or ground, the better or quicker will their influence be felt; and boiling, by removing the exterior cartilage and fat, renders the crushing more perfect. It is owing to this cause, undoubtedly, that many of the English agriculturists prefer dry to fresh bones; as the dust made from the former, is more suitable for sowing or drilling with seeds, than that of the latter. Bone dust is the most efficient on light and dry soils. It has been found also very useful on limestone soils and light loams; but on heavy clay or wet soils, this manure does little or no good. Bone dust is one of the most efficient manures on clover, particularly the white clover; exceeding gypsum in its effects on this plant. This is accounted for by the fact, that white clover abounds in phosphate of lime; and the phosphates of bones supply it in abundance. Although principally employed as a manure for turnips, in consequence of their importance in a rotation of crops for the animals of the farm, particularly sheep, it is considered by many farmers quite as useful, employed as a manure for potatoes, as it is for turnips. Bones are found to be more valuable, if subjected to a partial fermentation before being applied to the crops. If mixed with five or six times their weight of vegetable mould or fine rich earth, and turned over for several times for a few weeks before using, the value is much increased. Since the general use of bones has been introduced into England, vast quantities are gathered and imported from all parts of the world. As an instance of this traffic, it may be mentioned that at Hull alone, in 1815, eight thousand tons of bones were imported; and this amount, at the same place, had increased in 1835, to twenty-seven thousand five hundred tons.

Guano.—Guano is another manure of animal origin, which has lately been brought to notice. It is the excrement of sea-birds; and the immense masses of it existing on the rocky isles of the Pacific, in the vicinity of Arica, in Peru, are the accumulations of centuries. That, in this state, it differs from the newer excrements, can scarcely be questioned, as the action of the atmosphere must have produced many chemical changes during the lapse of years. Analysis shows it to consist chiefly of insoluble and soluble salts, chiefly phosphate of lime and organic matter, or salts 32 parts, and organic matter 68. A large portion of the organic matter is uric acid and ammonia; and regarded as a manure, it may be considered as a urate of ammonia. It appears as a fine brownish powder, with a strong marine or fishy smell, and gives off ammoniacal fumes when heated. Several ship loads of this manure have been carried to England; and the experiments show, what indeed the analysis would prove, that it is to be classed among the most efficient of manures. It has succeeded well, whether applied to grain, grasses, or to roots. There is no necessity of enlarging on this manure here, as it is not probable that it will ever be introduced to any extent into the United States, while we have so many easily accessible sources of fertility that have as yet hardly been touched, among us. It may be mentioned in this place, that the dung of domestic fowls is one of the most valuable of farm manures, far exceeding in power even that of the hog or horse; and though not equal to guano in ammonia, probably from there not being as much animal food used in its production, still deserving more attention in this respect than it has received.

Various animal products.—All animal products, capable of putrefaction or decomposition, can be converted into manures; fish, flesh, gristle, sinews, skin, horns, hair, wool, and indeed all animal solids or fluids are of this character. The man who allows his dead animals to putrefy and waste away above ground, is guilty of great improvidence; and converts what might be made a valuable manure into a decided nuisance. A dead horse, covered with earth or vegetable mould, mixed with a little lime or gypsum, will, when decayed and converted into manure and spread on the soil, add to the

value of the wheat or corn grown, not enough perhaps to buy a valuable new one, but not unfrequently more than the worth of the original animal. A more disgusting sight can scarcely be imagined, than to see the fences and trees around a farmer's yard, dressed out with dead lambs or other defunct animals, in the spring season. All such, should be buried at once, and thus made available in other forms.

Fish.—Of the substances named above, fish is the one most commonly used as a manure. In the vicinity of the sea, large quantities of fish are annually used in enriching the soil. This is particularly the case on Long Island and in Rhode Island. They are sometimes spread broadcast on the earth and ploughed in; at other times deposited in the hills of corn; sometimes spread over the meadows after the crop is mowed, and allowed to putrefy in the open air. The stench, where the putrefaction goes on in the open air, is intolerable; and can only be endured by those whose olfactories have been accustomed to the nuisance. This is a most wasteful practice, and should long ago have been abandoned. Treated in this way, but a small part of the actual value of the fish is realized; and it is not to be wondered at, that where the methods of using this manure are so different, widely different ideas of its value should be entertained. Fish should never be used fresh, or thrown at once upon the soil. The true way of preparing them as manure, is to make them into compost, by placing them in layers with muck, rock weed, peat, or even common loam, to putrefy. Where the soil is heavy or inclining to clay, where the compost is to be used, common shore sand, containing as it does, large quantities of particles of carbonate of lime, will be found useful as a composting ingredient with the fish. When the fish are decayed or putrefied, the mass should be dug over, the parts thoroughly mixed, and if much ammonia or offensive gas is liberated, a covering of earth should be given, and the mass be allowed further to ferment before using. In this way, fish never fail of being a valuable manure. Rock weed, eel grass, or in short any of those vegetable or animal matters that abound on the sea-shore, may be advantageously used in the preparation of these composts.

Refuse of factories.—There are many manufactories, particularly those of skins, furs and wool, where large quantities of manures of the most powerful kind, are annually suffered to go to waste, though to a much less extent than formerly. The refuse of such establishments, now frequently considered, and justly as now treated, a nuisance, may, by simple application to the soil, or still better by being made into compost, be used as the best of fertilizers. One of the best farmers and most successful breeders of our country, was driven into the business of agriculture, in self-defence as it were. He was an extensive manufacturer, and the difficulty of disposing of the refuse and waste of the establishment, compelled him to purchase a farm in the vicinity of the city, in enriching which, these matters have been most successfully employed. Those farmers who formerly could not be induced to receive such refuse materials as a gift, would now, after the proof they have seen of their value, be happy to purchase them at a liberal price. The furrier, the tanner, the morrocco manufacturer, comb maker, &c. &c., are all dealing in materials of the utmost value, when applied to the soil as manure; and the farmer little understands his true interests, who, living in the vicinity of any of these, does not avail himself of these refuse matters to the utmost extent permitted,

Manure of wool.—Perhaps there is no substance more rich in matters valuable as manures, than the washings and refuse of woollen factories. Chaptal was one of the first to call attention to this matter, and the instances he gave of their fertilizing power were of the most convincing kind. It is but very lately, however, that any attempts have been made in this country to render the refuse of our factories available. All remember, when around every factory and every clothier's shop in the country, piles of refuse wool, clippings, pickings of cards, and sweepings, accumulated in masses, never thought of as of value, but considered as matter of which the owners would most happily be quit. The method of disposing of them, when they could no longer be tolerated, was to throw them into the river; to apply them to the garden or farm, was not once thought of. Not long since, in one of our villages, I noticed a garden, the vegetables of which had a luxuriance forming a striking contrast to others near them, and the cause of the difference was asked. "It is all owing to the refuse of that clothier's and carder's shop," was the reply. "I saw in the Cultivator a notice of the value of such manures, and the owner of the shops gladly availed himself of my offer to remove it at my own expense. I gave my garden a good dressing, and as this is the second year, you may judge of the value of the material as a manure. It is probably the last I shall obtain, however," he added, "as the mill owners, after seeing its effect on my

garden, are now as anxious to save this refuse matter as they were before to get rid of it." The oily or sweaty matter on unwashed wool, is a soapy substance, having a base of potash, with an excess of oily matter, with slight traces of the carbonate and muriate of potash, all valuable as manures; and as all are easily soluble in water, such water should never be lost. A wool merchant at Montpelier, had his washing house in the midst of a field, the greater part of which he had, by the use of this wash, with which he watered his plants, transformed into a fine garden. The experiments made by Judge Buel and by Mr. Bement, with hog's bristles and horn shavings, were conclusive as to the value of these substances for manures. In short, as all substances of this nature are nearly pure gelatine, with a slight addition of the phosphates of lime, it is evident their decay must furnish an abundant supply of ammonia to plants, and therefore render them valuable as a manure.

Liquid manure.—There is but one other manure of animal origin to which it will be necessary to allude in this place, and that is urine, or as it is commonly called, liquid manure. Analysis proves that this is a substance peculiarly rich in materials required by plants, and experience enforces the results of analysis; yet not one farmer in a thousand, makes an effort to convert this mine of riches to any account, but the whole is most generally lost to him. Dr. Dana gives the following as the constituents of cattle urine, which may stand as the type of all others, though human urine and that of the horse, differ from this in the character and quantity of some of the salts contained in them:

Water,	65.
Urea,	5.
Bone dust,	5.
Sal ammoniac and muriate of potash,	15.
Sulphate of potash,	6.
Carbonate of potash and ammonia,	4.
	100.

Value of Urine.—Compared with cattle dung, it will be seen that while that gives only 2 lbs. of carbonate of ammonia to 100 lbs. of dung, the urine gives 5 lbs. of ammonia in its urea, and nearly three times that amount in the other ammoniacal salts. One third of urine is composed of salts, whose action on vegetation is of the most energetic and favourable kind; and yet there are thousands who call themselves pretty good farmers, who use all reasonable precaution to preserve the solid parts of their animal manures, that have never made an effort to save that which is of far the greatest value, the liquid part. But it must not be forgotten, that soils must contain decayed organic matter or humus, for these salts to act upon, otherwise liquid manure or pure urine can do no good. Where the wash of the barn-yard and stables is saved, the loss of a large part of the urine is prevented; but when, as is too often the case, this is wholly lost, not only is the urine thrown away, but a large part of the soluble humus of the manure accompanies it. It is an excellent plan, therefore, to have some reservoir for the reception of such liquid matters as would otherwise be lost. If this cannot be done, cover the bottom of your yards with muck, or even common loam, as this will absorb and retain much of the urine and liquid matters of the dung. Experience has demonstrated that a load of loam, saturated with urine, has a more powerful effect on vegetation, than the same quantity of best rotted stable manure. Human urine is richer in salts useful to vegetation than any other, containing, according to Dr. Thompson, in 1000 parts, 42½ lbs. of salts. The slightest attention on the part of the farmer, might prevent the loss of this; and many a load of swamp muck, or loam mixed with gypsum, might, when saturated with urine, be added to his available manures. Liquid manures, or rather urine, differs much in the salts it contains, according as the food is rich or otherwise. "White turnips gives a weaker urine than the Swedish, and green grass is worse than either," according to Dr. Dana. Turner and Liebig found that the urine of fattening animals is richer in salts than that of store animals. Indeed, the law so well known with regard to solids, that the richer the food the more valuable the dung, it is probable holds good in regard to the urine also.

Soot.—Soot is a valuable manure, peculiarly rich in humus as well as salts, and in its composition more nearly allied to the solid substance of animals, than any thing else. It contains of humus or geine, 30.70, of nitrogen 20., and of salts of lime 25.31 parts in 100. It also abounds in salts of soda, potash and ammonia. According to the analysis of Dr. Dana, 100 lbs. of soot contains as many of the valuable salts as a ton of cow dung, and its nitrogen, compared with that manure, is as 40 to 1. The ordinary farmer can make but little use of soot, as it is not to be had in the country in any considerable quantities; but those in the vicinity of cities may avail themselves of this manure with much profit. For the gardener or the floriculturist, soot is an excellent manure; but care must be taken not to use it too freely, as we have known tender garden plants at once destroyed by too liberal appli-

cations of it, particularly in a dry state. Mixed with water, in the proportion of six quarts of soot to one hogshead of water, it has been found a most efficacious liquid for watering plants, particularly those grown in green houses.

Ashes.—Ashes, leached or otherwise, are of great value as a fertilizer, especially when used on soils that are sandy or light. Unleached, the potash contained goes to form silicate of potash, and gives the supply of silex necessary for the stems of the grasses or corn; and leached, although the potash is the greater part of it separated, the remaining phosphates of lime and magnesia go far to restoring to the fields on which such ashes are strewn, the necessary matters of which previous cropping has deprived them. One hundred parts of the ashes of the wheat grain contain 32 parts of soluble, and 44 parts of insoluble phosphates, in all 76 parts. The value of ashes abounding in the required phosphates, when used on grain lands, may be seen at once, as well as the folly of those farmers who waste or sell the ashes produced in their dwellings.

[TO BE CONTINUED.]

Bethell's Process for Preserving Timber.

Among the numerous processes for the preservation of timber, which have for the last few years, come before the public, that invented by Mr. Bethell, is not so well known as some others, though apparently one of the most effective. The following account is from a recent number of the Mining Journal:

"Mr. Bethell's method consists in impregnating the vegetable fibre with oil of tar and other bituminous matters containing kreosote, and also with the pyrolignite of iron. The wood is placed in a close iron tank, similar to a high-pressure steam-boiler, filled with the liquid; the air is then exhausted, and more oil, or pyrolignite, is forced in by hydrostatic pumps, until the wood sustains a pressure equal to a hundred, or a hundred and fifty pounds per square inch, which is kept by frequently working the pumps during six or seven hours; when it will be found to weigh from eight to twelve pounds heavier, per cubic foot, than before, according to the porosity of the wood. This mode occurred to Mr. Bethell, from the consideration of the means adopted by the ancients, for preserving the bodies of the dead; it being a well-known law of nature, that whatever will preserve animal matter, will also preserve vegetable. Native *mummia*, or mineral tar, was used by the Egyptians, as well as that manufactured from vegetables, and one kind called *cedria*, was obtained from the cedar tree; the leaves and bindings of books, were sometimes covered with the latter, to render them indestructible by age. The effect produced by the injection of these substances, is the perfect coagulation of the albumen, as well as giving an air-tight coating, which not only preserves the fibre from destruction, but prevents atmospheric action, and consequently decay. A post of beach, or Scotch fir, thus prepared, becomes equal to the best oak, the bituminous matter binding the fibrous texture of the wood in one solid tough mass. The composition also preserves iron from corrosion, for an iron bolt, driven into a Bethellised post, will be found to remain any length of time free from rust; it resists the attacks of insects, and the *leredo* will not touch it; and it requires no painting, unless it be for ornament.

"The process has been adopted on the Great Western, Bristol and Exeter, Manchester and Birmingham, North Eastern, South Eastern, and other English rail-ways; and the sleepers, after three years use, appear in much better condition than when laid down.—*Campbell's Magazine.*

Multicole Rye.—This is the name given to a plant, a native of Poland, which has been introduced into cultivation with great success, in the South of France, and of which the following account is given in the London Farmer's Magazine:—"It grows on common soil suited to the old fashioned rye, but its habits are totally different. By the report of above thirty respectable agriculturists near L'Orient, who have cultivated it for the past two years, it does best when sown the 1st of June. Its growth is most rapid. Two crops of it are before July cut for hay, and by the 15th of August, a grain crop is reaped. The straw is from eight to ten feet high, and the ear from ten to eighteen inches long. An account of this rye may be found in the 'Transactions,' published by the French Minister of Agriculture, &c. Would not this variety of spring rye, be worthy of trial in those parts of the country where other grasses are difficult of growth, on soils rather sandy and light, but which, if in good condition, are the best for this grain. The growth, if correctly stated, is truly surprising.—*British American Cultivator.*

In northern countries, the shortness of the summer is compensated by the length of the days, and that in them vegetation goes through its various states in a much shorter time than in more southern regions, where the days are not so long.

St. George's Agricultural Society.

Annual meeting and ploughing match of the Agricultural Society of St. George's and Appoquinimink Hundreds, New Castle co., Delaware:

According to previous notice, the annual meeting and ploughing match of the Society was held at Middletown, on Thursday, November 9th. There was a large number of the neighbouring farmers in attendance; and some from a distance. All seemed to feel a lively interest in the proceedings of the day; as the time approached for starting the ploughs, the field of operations presented an animated spectacle; crowds of anxious spectators had taken up positions whence they could best witness the scene, while the ploughmen were busily engaged in brightening and preparing their ploughs and teams for the coming contest. At length the word was given by one of the judges, and off started the competitors for the premiums of the Society, each man apparently absorbed in the management of his team, and eager to perform the most creditable work: they appeared unconscious of the crowd of admiring spectators that surrounded them. The ground was laid off in lots of one-fifth of an acre each; the ploughing was completed in forty-six minutes. After retiring from the field, the Society sat down to an excellent dinner, prepared by Mr. Cochran, the worthy host of the Middletown Inn. After which, the Society organized and elected the following officers, to serve for the ensuing year.

Major John Jones, *President.*

J. M. Woods, Charles Tatman, } *V. Presidents.*

J. S. Naudain, *Recording Sec'ry.*

Daniel Corbit, *Cor. Secretary.*

A. P. Reading, *Treasurer.*

James T. Carpenter,
George Karsner,
John Whitby,
Isaac Gibbs,
James V. Moore,
William E. Perry,
Directors.

The report of the judges of the ploughing match, was then read, as follows:

The committee appointed on the part of the Society, to decide upon the merits of the ploughing performed to-day, and to award the premiums—report as follows:

The committee remark in the first place, that the ground selected, though the best that could be procured for the occasion, was not such as could have been desired, it being a wheat stubble, and although previously mowed and cleaned, was still very foul in many places with dead grass. There was also, considerable disparity in the different lands, which were allotted to the ploughmen; which the committee were obliged to take into consideration, rendering it more difficult for them to make up a decision.

The ploughing was all well executed, and reflected much credit upon the different competitors,—the fifth of an acre was ploughed in thirty-seven to forty-six minutes, and was uniform in depth, averaging about five inches.

The committee award to George Carter, Eastman's Baltimore Patent plough, John Jones owner, the first premium of $5.

To Richard Carter, Moore's plough, John Smith, owner, the second premium of $3 and Farmer's Cabinet for one year.

To William Cochran, Beach's Concave plough, John Whitlock, owner and maker, the third premium of $2 and Cabinet for one year.

To Isaac Woods, Beach's Concave plough, J. M. Woods, owner, the fourth premium of $1 and Farmer's Cabinet, for one year.

And to Charles Carter, Beach's plough; Levi Ryan, Concave plough; Joseph Carter, Sinclair's Baltimore Patent plough; and George Pearce, Prouty's Centre-draught plough, the committee award the Farmer's Cabinet, for one year each.

The committee remark further, in relation to the Centre-draught plough of D. O. Prouty, that it was not in proper order for a fair trial, having been much used, it was greatly worn and very dull; it was drawn by a pair of mules belonging to Major John Jones.

The report of the committee having been read and accepted, the attention of the Society was called to an elegantly finished plough, the manufacture of Mr. John Whitlock, of Middletown, the workmanship and finish of which, were of the most beautiful and perfect character, reflecting great credit upon the mechanical abilities and enterprise of Mr. Whitlock, and of Mr. Percival, of Middletown, who prepared the iron work for the plough. The Society deemed it unsurpassed for beauty and accuracy of finish, combined with strength and durability, and unanimously voted the sum of $20 to Mr. Whitlock, in consideration for his plough.

Ordered, that the above extract of the proceedings of the Society, be published in the Farmers' Cabinet.

J. S. Naudain, *Recording Sec'ry.*

For the Farmers' Cabinet.

Little Delaware.

Mr. Editor,—I attended the exhibition of the Pennsylvania Agricultural Society and its ploughing match, at the Lamb tavern, on the 4th, 5th, and 6th of last month, and had the pleasure of seeing most that was to be seen, and of partaking of the hospitalities of the Society, and also of listening to the able Address of P. A. Browne, Esq., in which he gave much statistical information, in relation to the agricultural, mineral, and manufacturing wealth of the United States, and of several of the individual States, in which Pennsylvania, the Keystone, compared well with the wealthy old Bay State, the Empire State, or the Queen of the West, —no reference was made to *Little Sis:* Why her resources were overlooked in the estimate, I cannot imagine: certain I am, it was from no ill feeling towards her, either in the orator, or the officers, or members of the Society, as might be abundantly inferred, during the three days of the exhibition, from the attention to the citizens of Delaware generally, and particularly by the liberal premiums awarded to those who took up stock or agricultural implements, and those who entered the lists as ploughmen. After hearing and seeing the statement made by Mr. Browne, I thought I would look into the census returns of 1840, and see how New Castle county would compare with some of the counties in Pennsylvania.—Herewith I send a few items, not having time to extend the inquiry further;—if you can cull any thing from them that would be useful, you can do so.

	Wheat. *bushels.*	Oats. *bushels.*	Indian corn. *bushels.*	Gun Powder. *lbs.*	Machinery manufactured.	Leather manufactured.	Barrels of flour.	Produce of the Dairy.	Cotton spindles	Total capital invested in manufac's
Pennsylvania,	13,213,077	20,641,819	14,240,022	1,184,225	$1,998,152	$3,482,793	1,193,405	$3,187,292	146,494	$31,815,105
Lancaster.	1,129,277	1,376,673	1,307,600	none.	22,920	148,530	148,941	86,760	20,000	1,213,484
Berks,	381,959	584,111	490,777	54,900	none.	19,700	26,682	85,431	none.	250,745
Chester,	438,132	1,019,745	826,413	none.	41,750	117,768	18,700	153,739	16,268	681,365
Dutchess, N. Y.	171,724	1,300,613	710,473	none.	356,800	127,645	22,435	643,834	24,343	1,944,488
New Castle.	191,724	564,015	559,707	2,100,000	314,500	447,200	76,194	66,277	24,492	1,384,700

The Pennsylvania State debt is estimated at $40,000,000; Delaware is not in debt, but has funds, the interest of which pays to each of the *seventy-four School Districts* of New Castle county, this year, $147.

Many of the valuable products of Delaware, are not included in the U. S. returns. Amongst the items omitted are, furs, skins, and feathers. The fur-trade on the Delaware marshes, is quite extensive; I have known a single trapper, to take over 100 muskrats in one night; besides *otters, minks, foxes,* and occasionally a few old *coons.*

From the facts here set forth, New Castle county compares well with the rich and highly improved counties of Pennsylvania, or old Dutchess, the pride of New York. I have taken these counties, because they are well known to be in as high a state of cultivation as any in the United States. The farmers of New Castle county have been taking a kind of *Ripp Van Winkle nap,* for nearly one hundred years; during this time the land has been hard tilled and much exhausted; but the spirit of improvement is now abroad—our farmers are *waking up,*—several of them have put as much as 10,000 bushels of Pennsylvania lime on their farms in a single season,—and unless I am much deceived, the statistics of 1850, will give a very different result from the one last taken, and still more gratifying. Already many of our farmers have doubled, and some have quadrupled their crops, since 1840. I will cite one instance of extraordinary yield; this is a field of Dr. Noble's, near the Summit-bridge of the Chesapeake and Delaware canal,—one acre of which, that was measured, yielded 47 bushels of wheat the present year, with but a single dressing of eight cart-loads of manure, procured in Philadelphia, at a cost of one dollar per load, or only eight dollars per acre; and this was on land that was lately purchased by the Doctor for fifteen dollars per acre: this land would not have produced more than five bushels of wheat three years ago. The census returns will show the skill of our artizans, and the value of our manufactures,—and they will also give a faint view of the value of our District school system; a system, the absence of which, when I was a boy, I now feel the effects of. Nor is the health of Delaware quite as bad as some people supposed it to be; in Pennsylvania, one in about 10,400 arrives to the age of one hundred years; while the chances for long life seem better in Delaware, where one in about 2,400 attains that age.

J. Jones.

Wheatland, Delaware, Nov. 18th, 1843.

For the Farmers' Cabinet.

Calico Corn.

THE readers of the Cabinet may be pleased in hearing of an article of grain, that approaches nearer than any other in making flour and bread similar to wheat. I send a sample of the flour and two common sized ears of the corn. The hull or covering of the grain, is of so many and various colours, that when ground fine, some of the particles being bolted through with the flour, may have a tendency to darken it some; but as to the colour of the flour or bread, few, if any, could discover from the appearance of either, which was made from the corn, or which from the wheat, when laid by side each other. The bread of the corn, when mixed and prepared for baking in the same manner as wheat flour, will become light sooner than wheat; and in mixing, is more difficult; and for pies, does not stick together as well as wheat flour. In taste, a difference can be discovered. But let a person who has no knowledge of the article, make use of the bread, pudding, or pies, which occurred at my own table, and let him be asked of what the article was made, and he would pronounce it wheat—so near does it approach to it.

I have said enough by way of recommendation, as it will recommend itself more rapidly than seed can be procured. The object of my present remarks, is more particularly to those who may become possessed of a portion of it to plant, that they may be careful to prevent it from becoming adulterated by mixing. It is not sufficient to plant a portion in the garden, and having a corn-field of other corn near by. It will mix much further than I could have believed, had I not seen it.

In raising what little I have, I planted it the 24th day of Sixth month, and gathered it the 10th inst.; and my neighbour having a lot of corn near by, I purchased the privilege of topping, or cutting off the tassel, to prevent mixture. I am told, and believe, as much per acre can be raised, as of other corn; the stalks frequently have two ears on, and the ears generally have as much on as other corn. I have observed almost every colour among the grains of this corn, but I have not seen yellow, without believing it was a mixture. I have seen some lots that retained all the colours, but I had no doubt of their being much adulterated, from the hardness and shape of the grain,—of their compactness on the cob, and their straight rows, which do not often occur in the genuine *Calico corn.*

Please retain the two ears of corn and flour at the office of the Cabinet, for inspection.

I have omitted to mention, that it ought to be gathered as soon as it is ripe, or it will swell, sprout, and damage; particularly if the weather should be wet or damp. I had one and three-quarter bushels of shelled corn, weighing 72 or 73 pounds, when taken to the mill; and had 30 pounds of superfine, and 20 of common flour—and 21 pounds of bran; and several millers agreed in opinion, that much improvement in grinding might be made, with a little preparation.

Respectfully, A. W. TOWNSEND.

New Brighton, Pa., Tenth mo. 30th, 1843.

THE COMPOST HEAP.—Begin with the arrival of the first favourable weather to gather materials for compost. Don't let a particle of matter capable of being converted into food for plants, slip through your fingers. Manure is the farmer's capital—the wand, by the favourable instrumentality of whose mystic and occult operations, he diversifieth the surface of the earth with the smiling beauties of vegetation, and causeth the waste places thereof to bloom, and the desert to blossom as the rose. "Give me a sufficiency of manure," said an elderly farmer to us, recently, "and I can work out a living in any country, and from any soil." The merchant must have capital—the mechanic must have instruction, materials and tools, and the farmer whose heritage is the broad fields and fertile valley of his "mother earth," *must* have MANURE. It therefore behooves every one to be attentive to this grand point, and to gather up the means of enriching and rendering fruitful the soil, the products of which sustain his life.

No one who has not made the experiment will be able easily to appreciate the importance of attending, practically and *habitually* to the rules thus hastily laid down. Let every one, therefore, be sedulous in his efforts, and our word for it, he will never have occasion to deprecate the results.—*Maine Cultivator.*

CATERPILLARS.—An English Agricultural paper gives the following method of destroying caterpillars, which was accidentally discovered, and is practised by a gardener near Glasgow. A piece of woollen rag had been blown by the wind into a currant bush, and when taken out was found covered by the leaf-devouring insects. He immediately placed pieces of woollen cloth in every bush in his garden, and found next day that the caterpillars had universally taken to them for shelter. In this way he destroys many thousands every morning. Try it.

Occasional failure of Seed Potatoes.

The following article from a late number of Johnston's Lectures on Agricultural Chemistry and Geology, will be read just now, with particular interest by our farmers. The potato crop has become an important one, both to the grower and consumer. The loss sustained by its decay and worthlessness in this vicinity, this season, is of very serious extent. In some neighbourhoods in this State, of easy access to our Philadelphia market, where farmers have planted from one or two, to ten or fifteen acres, they have lost them almost bodily. Farmers have been named to us, both in Pennsylvania and Jersey, who have lost by rotting, after they were dug, 1,500 or 2,000 bushels. It is stated also, that cases have occurred, where hogs that had eaten of them, had died, as it was believed, in consequence. So far as we are advised, this disease of the potato is new, to our oldest farmers. It would be gratifying and interesting, if some of our correspondents would furnish for the Cabinet, such facts and suggestions as bear upon the subject.

The article below, has no reference to failures of this character, but only to the quality of the seed. Potatoes that are brought from the Eastward, are occasionally so heated in the vessel, as to become unfit for planting. Some five or six years ago, the editor was desirous to change his seed, and obtained some very fine Mercer potatoes, from on board a vessel from Maine. They were planted, but about one-fourth of them only, ever vegetated.—Ed.

"The seeds of all cultivated plants are known at times to fail, and the necessity of an occasional change of seed, is recognized in almost every district. In the Lowlands of Scotland, potatoes brought from the Highlands, are generally preferred for seed, and on the banks of the Tyne, Scottish potatoes bring a higher price for seed, than those of native growth. This superior quality is supposed by some, to arise from the less perfect ripening of the *up*-land potatoes, and in conformity with this view, the extensive failures which have taken place during the present summer, 1843, have been ascribed to the unusual degree of ripeness attained by the potatoes during the warm, dry autumn of the past year.

"This may, in part, be a true explanation of the fact, if, as is said, the ripest potatoes always contain the largest proportion of starch—since some very interesting observations of Mr. Stirrat, of Paisly, would seem to indicate that *whatever increases the per centage of starch, increases also the risk of failure in potatoes that are to be used for seed.** This subject is highly deserving of further investigation.

"*Effect of saline top-dressings on the quality of the seed.*—It may be doubted, however, whether the relative proportions of starch are to be considered as the *cause* of the relative values of different samples of seed potatoes. This proportion may prove a valuable test of the probable success of two

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* "I insert Mr. Stirrat's letter upon this subject, not only because his observations are interesting in themselves, but because they are really deserving of the careful attention of practical men:—

"Sir,—The following experiment with potatoes, was tried with the view of discovering the cause of so many failures in the crops of late years, from the seed not vegetating, and rotting in the ground. I had an idea that the vegetative principle of the plant might become weak, in consequence of being grown on land that had been a long time subjected to cropping, and not allowed any length of time to lie at rest. I, therefore, raised a few bolls on land that had lain lea for 70 years,—being part of my bleach green,—and found that these on being planted again the following year, were remarkably strong and healthy, and not a plant gave way, and I have continued the same method for the last six years, and the result has, in every instance, been equally favourable. Four years ago, one boll of my seed potatoes was planted along with some others in a field of about an acre, the other seed was grown on the farm, and the seed all gave way excepting that got from me. They were all planted at the same time and with the same manure. From these circumstances, I am of opinion, that if farmers were careful in raising their own seed potatoes from land that has lain long in a state of rest†—or where that cannot be had, the same object can be obtained by bringing new soil to the surface by trenching as much as is necessary, or by the use of the subsoil-plough—failures of the potato crop from the seed not being good, would become much less frequent. I am somewhat confirmed in this opinion, by the fact, that it has been found for the last dozen of years, that generally the best seed potatoes have been got from farms in the moors or high lands of the country. The reason of this may be, that these high lands have been but of late brought under crops of any kind, and many of them but newly brought from a state of nature, and the superiority of seed potatoes from these high lands may not at all arise, as is generally supposed, from a change of soil or climate.

"Potatoes raised on a new soil, or on ground that has been long lying lea, are not so good for the table as the others, being mostly very soft, and, by the following experiment, it would appear that they contain a much less quantity of farina than those which are raised from land that has been some time under crop, and, perhaps, this is the reason why they are better for seed. From one peck of potatoes, grown on land

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† "Mr. Finnie, of Swanstone, informs me, that the growing of potatoes intended for seed, upon new land, has long been practised by good farmers. Mr. Little, of Carlesgill, near Langholm, writes me, that in Dumfriesshire, they obtain the best change of potatoe seed from mossy land—of oats and barley, from the warmer and drier climate of Roxburgshire. The grains, he adds, degenerate by *once sowing*, still looking plump when dry, but having a thicker husk, and weighing two or three pounds less per bushel. The deterioration of seeds, in general, is a *chemico* physiological subject of great interest and importance, and will doubtless, soon be taken up and investigated.

samples when planted, without being itself the reason of the greater or less amount of failures. With the increase of the starch, it is probable that both the albumen and the saline matter of the potato, will in some degree diminish, and *both of these* are necessary to its fruitfulness, when used for seed.

"The value of the saline matter is beautifully illustrated by the observation of Mr. Fleming, that the potatoes top-dressed with sulphate and nitrate of soda, in 1841, and used for seed in 1842, 'presented a remarkable contrast to the same variety of potato, planted along-side of them, but which had not been so top-dressed in the previous season. These last came away weak, and of a yellowish colour, and under the same treatment, in every respect, did not produce so good a crop by fifteen bolls (3¾ tons) an acre.' This observation, made in 1842, is confirmed by the appearance of the crops now growing (July, 1843,) upon Mr. Fleming's experimental fields. The prosecution of the inquiry opened by his experiments, promises to lead to the most valuable practical results. They may teach us how to secure, at all times, a fruitful seed, and thus to dispense with supplies of imported produce."

Report on Swine.

The Report of the Committee of the Essex, Mass., Agricultural Society, on swine, is quite a ludicrous affair. Some of the puns perpetrated, are tolerably fair specimens of *hog-latin*, and certainly do no discredit to the calculating powers of a race, who, all will agree, are adepts in "*the extraction of roots.*" We give the two following paragraphs as a specimen of the vein that runs through the paper.—Ed.

"The hog has much reason to complain of his treatment from the hands of man. Not only is he deprived of his liberty, but he is exposed to violence and assassination, and seldom lives to old age, or dies a natural death. No sooner does the youthful porker arrive at adult swinehood, and exhibit the fine proportions of his sleek and portly form, than his brutal master begins to show a most unaccountable disposition to get him into "*hot water,*" and he is cut off "in the midst of his usefulness," by the hand of the executioner. In his dealings with the hog, man reverses the simplest rules of justice, as he *hangs* him first, and *tries* him afterwards.

"There is something in the *name* of the animal we are considering, which is associated with literature and science in their highest walks. The Ettrick Shepherd, whose simple poetry has beguiled many an hour on this side of the water, as well as in his native Scotland, rejoices in the name of *Hogg;* and the mental food of many an urchin in the long winter evening, is derived from *Hogg's Tales.* In science and philosophy, how much would have been lost to the world if no light had been shed upon it by *Bacon!* and what streams of forensic eloquence at the Senate and the Bar, have proceeded from a *Choate!*"

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near Paisley, which has been almost constantly under crop for the last thirty years, I obtained nearly seven lbs. of flour or starch; and from the other peck, grown on my bleach green, the quantity obtained was under four lbs., from which it would seem that as the vegetative principle of the plant is strengthened, the farinaceous principle is weakened, and *vice versa.*

"James Stirrat.

"Paisley, 22nd November, 1842.

Industry.—The following anecdote, from an English paper, may give encouragement to the industrious:

"Not long ago, a country gentleman had an estate of £200 a year, which he kept in his own hands, until he found himself so much in debt, that to satisfy his creditors, he was obliged to sell the half, and let the remainder to a farmer for twenty years. Towards the expiration of the lease, the farmer coming one day to pay his rent, asked the gentleman whether he would sell his farm. 'Why, will you buy it?' said the gentleman. 'If you will part with it, and we can agree,' replied the farmer. 'That is exceedingly strange,' said the gentleman. 'Pray tell me how it happens, that while I could not live upon twice as much land, for which I paid no rent, you are regularly paying me a hundred pounds a year for rent, and are able in a few years to purchase the farm?' 'The reason is plain,' replied the farmer. 'You sat still and said *go*—I got up and said *come;*—you laid in bed and enjoyed your estate—I rose in the morning and minded my business.'"

Preservation of Apples.—Apples may be preserved a long time, by packing them in plaster of Paris, which preserves them with all their freshness. It is also suggested, that powdered charcoal would be excellent for this purpose. The antiseptic qualities of this substance are familiar to all. We have known grapes and other fruits kept till the middle of winter, by being packed close in cotton, and excluded from the air.—*Massachusetts Ploughman.*

Insanity of the Horse.

THERE is no doubt that the animals which we have subjugated, possess many of the same faculties as the human being—volition, memory, attachment, gratitude, resentment, fear, and hatred. Who has not witnessed the plain and manifest display of these principles and feelings in our quadruped dependants! The simple possession of these faculties, implies that they may be used for purposes good or bad, and that, as in the human being, they may be deranged or destroyed by a multitude of causes which it is not necessary to particularize. In the quadruped as in the biped, the lesion or destruction of a certain part of the brain, may draw after it the derangement, or disturbance, or perversion of a certain faculty. It is only because the faculties, and good as well as bad properties of the inferior beings, have been so lately observed and acknowledged, that any doubt on this point can for a moment be entertained. The disordered actions, the fury, the caprices, the vices, and more particularly the frenzy and total abandonment of itself, which are occasionally shown by the brute, are analogous to certain acts of insanity in man.

The reader is indebted to Professor Rodet, of Toulouse, for the anecdotes which follow: A horse, seven years old, was remarkable for an habitual air of stupidity, and a peculiar wandering expression of countenance. When he saw anything that he had not been accustomed to, or heard any sudden or unusual noise, whether it was near or at a distance, or sometimes when his corn was thrown into the manger without the precaution of speaking to him or patting him, he was frightened to an almost incredible degree; he recoiled precipitately, every limb trembled, and he struggled violently to escape. After several useless efforts to get away, he would work himself into the highest degree of rage, so that it was dangerous to approach him. This state of excitement was followed by dreadful convulsions, which did not cease until he had broken his halter, or otherwise detached himself from his trammels. He would then become calm, and suffer himself to be led back to his stall: nor would anything more be seen but an almost continual inquietude, and a wandering and stupid expression of countenance. He had belonged to a brutal soldier, who had beaten him shamefully, and before which time he had been perfectly quiet and tractable.

A Piedmontese officer possessed a beautiful, and in other respects serviceable mare, but which one peculiarity rendered exceedingly dangerous—that was a decided aversion to paper, which she recognized the moment she saw it, and even in the dark if two leaves were rubbed together. The effect produced by the sight or sound of it, was so prompt and violent, that she several times unhorsed her rider. She had not the slightest fear of objects that would terrify most horses. She regarded not the music of the band, the whistling of the balls, the roaring of the cannon, the fire of the bivouacs, or the glittering of arms. The confusion and noise of an engagement made no impression upon her; the sight of no other white object affected her. No other sound was regarded; but the view or the rustling of paper roused her to madness.

A mare was perfectly manageable and betrayed no antipathy to the human being, nor to other animals, nor to horses, except they were of a light-grey colour; but the moment she saw a grey horse, she rushed towards it, and attacked it with the greatest fury. It was the same at all times, and everywhere. She was all that could be wished on the parade, on the route, in the ranks, in action, and in the stable; but if she once caught a glimpse of a grey or white horse, she rested not until she had thrown her rider or broken her halter, and then she rushed on her imagined foe with the greatest fury. She generally contrived to seize the animal by the head or throat, and held him so fast that she would suffocate him, if he were not promptly released from her bite.

Another mare exhibited no terror except of white inanimate objects, as white mantles or coats, and particularly white plumes. She would fly from them if she could; but if she was unable to accomplish this, she would rush furiously upon them, strike at them with her fore feet, and tear them with her teeth.

These instances are selected from various others, because they approach so nearly to what would be termed insanity in the human being. It is confined to one object,—it is a species of monomania, and as decided insanity as ever the biped discovered. One of these horses, the second, was by long and kind attention divested of this insane terror, and became perfectly quiet and useful; but the other three bid defiance to all means of cure and to coercion among the rest. If sufficient attention were paid to the subject, many of the obstinate caprices and inexplicable aversions which we can neither conquer nor change, would be classed under the term insanity. There cannot be a more remarkable analogy than that which sometimes exists between the insanity of man and these singularly capricious fancies in animals. The subject is worthy of attention. Has the prin-

ciple of hereditary predisposition been applied to any of these anomalies?—***Youatt on the Horse.***

Cultivation of Cranberries.

A NUMBER of gentlemen have made inquiries at our office, in regard to the best mode of propagating this much valued fruit. But very few experiments have yet been made, to our knowledge, on its cultivation, though there seems to be but little doubt, that cranberries of some kind or other may be grown in almost any soil.

The common cranberry of our Middlesex and Norfolk county meadows, has become famous, half the world over, without any aid from closet farmers, or from chemists. This kind of fruit seems to delight in wet grounds, and we incline to *guess* it will not flourish greatly in any other soils. The vines can be easily transplanted, and the task would not be Herculean, to fill up an acre of soft meadow with plants enough for the whole.

Were we to engage in this business, we would use sharp spades and take up sods six or eight inches square, from meadows where the vines are already too thick. About 2,000 of these would be enough for an acre; they would then be half as thick as hills of corn, and would soon spread so as to cover the ground. It will not hurt an old bed to thin them out. We are satisfied, that digging among the old vines will aid them, as digging among strawberry vines will improve the strawberry harvest.

Rakes are now made on purpose to gather the fruit, and though these rakes tear the vines in pieces annually, yet the product has been much increased by raking. A near neighbour of our own, began but a few years ago, to rake a little patch of one-fourth of an acre. He obtained 12 bushels only, the first season; the next year 18, then 25, and so on, till his last harvest on this fourth of an acre, was 65 bushels of handsome cranberries; we saw them on his barn floor. We have yet heard of no one who has injured his cranberry vines by raking.

In regard to flowing, we need more experiments; the water may generally be kept over the vines till the middle of May. It should be kept on as long as possible, to keep the blossoms back and out of the way of frosts; but if the water becomes warm, it will kill the vines; you see no cranberries in meadows that are kept flowed till June. It is better, however, to draw the water off as soon as the first of May, and after a day or two, flow again. In 1842, the cranberries were very generally destroyed by the uncommon frosts of June, as late, we think, as the 10th. Frosts in September, sometimes destroy the berries, and it would be well to flow them, in cold nights, where water is plenty.—***Massachusetts Ploughman.***

A *Long* SHORT-CAKE.—Bread stuffs form an important item in the rapidly growing commerce of this city. To illustrate the extent of this branch of our trade, we have made a small calculation, which will be found to be entirely correct.

During the last week in May, there was sent from Buffalo, via the canal, sixty-one thousand and ninety-seven barrels of flour, and sixty-eight thousand six hundred and fifty-six bushels of wheat. Allowing each bushel of the latter to make forty-five pounds of flour, and each barrel of the former to contain one hundred and ninety-six pounds, the total of pounds was *fifteen millions sixty-four thousand five hundred and thirty-two!* During the same period, there was sent from this city, along with this immense quantity of flour, *thirteen hundred and forty-eight thousand two hundred and thirteen pounds of butter and lard.* There was also sent over two and a quarter millions of pounds of pearl-ash and other ashes. Now, if the good people on the road will furnish proper "wetting" and the place to bake it in, we will put two pounds of good flour in each foot of cake, and lard, butter and salæratus enough to match, and treat them a continuous short cake *fourteen hundred and twenty-six miles and a half long.*

One end of this cake might be placed in the capital of Missouri, and the other would not only reach to Boston, but it would "stick out" over the Atlantic, some two hundred miles. Of this, all the people of the United States might eat their fill, besides giving the fish of the great deep a "right smart nibble."—***Buffalo Commercial Advertiser.***

GOOD COWS.—Mr. E. D. Allen, of Le Ray, Jefferson county, N. Y., made, in the months of May and June, from his dairy of ten cows, eight tubs of butter, weighing eight hundred and seventy-two pounds, (nett weight) being a fraction short of forty-four pounds per month, per cow, on an average. The Jefferson dairies are not likely to lose their high credit this year, if Mr. Allen's be taken as a sample.—***British American Cultivator.***

A LEARNED doctor has given it as his opinion, that tight lacing is a public benefit, inasmuch as it kills off the foolish girls, and leaves the wise ones for women.

Horticultural Address—Washington, D. C.

We are indebted to J. S. Skinner, for a copy of his Address before the Columbian Horticultural Society, at Washington, D. C., delivered on the 5th of Tenth month, last. We have enjoyed the reading of it, and have selected from it the following paragraphs, calculated, as we think, to be really useful.—Ed.

"Few sciences in this age of progress, have made greater advances than horticulture; and that is evinced in nothing more than in the melioration of the various fruits and the multiplication of their varieties. The new kinds produced within this century, by the skilful experiments and untiring perseverance of such men as Knight, and Van Mons, and Loudon, and others, far excel all previously known. The people of New Jersey, as those south of it generally, have probably acted on the persuasion that, because they once had excellent peaches, they had yet only to graft or bud from a good old variety, on a thrifty looking stock, to secure the continuance of that fruit in all its excellence; either forgetting, or not knowing that, according to the opinion of Mr. Knight and other distinguished naturalists, 'confirmed,' as Kenrick says, 'by experience,' the different varieties of fruit have their periods of existence fixed by the immutable laws of Nature, and that after a certain time come on their decline and final extinction. Apples of the most exquisite flavour, and a kind of pear quite equal to the Seckle, have within my memory, entirely disappeared. If the people of New Jersey, would regain for their State its former character for the production of superior peaches, they must set themselves to work to raise from the stone, by successive plantations, until an inferior fruit is meliorated, which, as to the peach, experience teaches may be done, and a new and superior variety established in the third generation; and from this new variety so established, they may go on to bud and graft again at pleasure. Any nurseryman, who could make it appear to the public satisfaction, that his choice fruits had been thus, as it were, created by himself, and who would keep a register of their births, would deserve preference over all competitors. It would be well, too, probably, for the Jersey, and all other people, to plant their orchards on new sites, as distant as may be from the old orchards; for it is not impossible, that the old trees may have exhausted the land of the 'particular juice,' as Lord Bacon calls it, which contributes to the growth of the peach.

"It has been intimated to me by a gentleman, whose wide range of reading has embraced the science of botany, and who is, in his own walks, a close observer of the works of Nature, that our crab-grass, which grows so luxuriantly at this season, not only without, but against all our efforts, and which is so greedily devoured by all our graminivorous animals, might be cultivated into a valuable material for highland meadow. Out of how many less promising originals have we derived some of the choicest fruits of agriculture and horticulture?

"The Washington market has wonderfully improved, within my recollection, in the products of both the orchard and the kitchen garden. As to flowers, when our friend Buist, a host within himself, came here a brawny young Scotchman, some years since, he was frankly and honestly advised to take his spade and go to rearing *cabbages*. But, under all discouragements, he has persevered. The taste has increased by what it fed upon, until now, it is highly gratifying to be assured that the desire to possess and to cultivate flowers, has fully kept pace with the means of indulgence afforded by our skilful and industrious florists. For the production of fruit, and ornamental trees, and shrubs, and vines, the District and neighbourhood are largely indebted to Mr. Peirce. And as for the art of transplanting, and after-management, and for skill and success in all horticultural operations, Maher seems absolutely to possess some power of conjuration. His very touch is a life-preserver. Exotic or native, evergreen or deciduous, all alike live and flourish under his management.

"The public taste is yet to be cultivated for the *okra*. Of the whole list of esculents, I do not know one, the consumption of which bears so little proportion in this community to its cheapness and its excellence. For these recommendations, it may well challenge a comparison even with the tomato, which, within *my* recollection, was cultivated as a horticultural curiosity merely, so slow are mankind in proceeding from the known to the unknown, in matters susceptible of the most agreeable demonstration.

"I argue an ignorance of the great excellence of this vegetable, and the absence of what may, if you please, be called an acquired taste for the use of it, from the fact, that a gentleman, whose beautiful and well cultivated grounds overlook the city, and where I lately saw it in great quantity going to seed, told me that his gardener had declined sending it to market, as the price would not warrant the trouble. Now, if you will ask those who are familiar with it, they will tell you that no vegetable mate-

rial can, at this season, supply a soup to be compared to *okra*, or gumbo soup, for its simple, digestible, and palatable qualities. But, unfortunately, as well for our health as our morals, especially in hot weather, we are emphatically the most *carnivorous* people on the globe. Have what else we may, it would seem as if every mother's son of us, besides his daily bread, must each have his 'pound of flesh.'

"A native of Asia Minor, whence, according to Pliny, it was introduced into Greece, and afterwards into Italy, the plum thrives in a soil containing a goodly portion of sand and mellow loam, neither too wet nor too dry. Abercrombie is of opinion, that any fertile garden or orchard soil, is suitable for its growth. The modes of propagation are by budding and grafting; but the former is generally preferred, because of the tendency of this tree to gum from large wounds. Grafting is performed as early as practicable in spring, and also in June and the beginning of July; budding at the usual season, during the months of July and August. The plum tree should not be too much pruned, or it will grow too luxuriantly to produce fruit, and will sometimes gum and spoil. Hedges of the *mirabelle*, a small round cherry-shaped plum, are to be found in the vicinity of Ghent, and the stocks are used by the nurserymen to bud nectarines and peaches on. In our climate, the plum has been liable beyond most of the fruits, to depredations of the same insect that injures the peach. The fruit becomes perforated, soft, diseased, and falls from the tree. Excoriations deface the trunk, and gummy exudations impair its vigor and vitality. All these evils are within the control of human care and industry, and require them as certainly as do the diseases of the human body. A proper attention, it is believed, to the roots in spring,—baring, exposing for a few days, and fortifying them with suitable composts, such as mixtures of ashes, cow-dung, whale-oil, lime, &c., or laying a pavement of flat stones, or bricks, or large gravel, to the extent of a diameter of two or three feet from the trunk—is said to afford an effective protection against the fatal attacks of this insidious foe."

Domestic Economy.

In travelling over New England, one is frequently struck with examples of thrift, comfort, and humble independence, the direct results of industry, sobriety and frugality, as instructive as they are beautiful. A benevolent mind always contemplates them with unmingled pleasure. They present themselves often in circumstances to ordinary view the most inauspicious. The conditions, which appear most unfriendly to success, seem to constitute the very grounds or occasions of it. The courage is kindled and the resolution strengthened, in proportion to the difficulties to be met; and, in a manner the most encouraging to honest labour and strict temperance, they show the power of man, in a high degree, to command his own fortune. Massachusetts is full of these examples. I do not know that they are not as common in other places. It is impossible, however, that they should exist but in a condition of freedom, where a man has a freehold in the soil; where, unawed either by overgrown wealth or oppressive power, he wears the port and has the spirit of a man; and where, above all things else, he has the voluntary direction of his own powers, and a perfect security in the enjoyment of the fruits of his own toil.

It will not be without its use, if it does no more than present to the imagination a charming picture of rural comfort and independence, if I refer particularly to one instance which strongly attracted my attention. In one of those beautiful valleys in which Franklin county abounds, where the surrounding hills in June, are covered to their summits with the richest herbage, and dotted over with the rejoicing herds, at the foot of the hills, near a small stream which here and there spreads itself like a clear mirror encased in a frame of living green, and then at other places forces its gurgling waters through some narrow passes of the rocks, you may find an humble unpainted cottage, with the various appurtenances of sheds and styes, and barns around it. Three or four stately trees present themselves in front of it. The door-yard is filled with flowers and shrubs; and the buildings seem to stand in the midst of a flourishing and full-bearing orchard, the trees of which are clothed with living green, with no suckers at their roots, unadorned with the nests of the caterpillar, unscathed by the blight of the canker-worm, and with their bark clean and bright, indicating alike the health of the tree and the care of the proprietor. Every part of the premises exhibits the most exact order and carefulness. No battered axe lies at the wood-pile; no rotten logs, no unhoused sled, no broken wheels, no rusted and pointless plough, encumber the roadway; no growling sow, with her hungry and squealing litter, disputes your entrance into the gate; no snarling dog stands sentry at the door. The extended row of milk-pans is glittering in the sun; and the churn and

the pails are scrubbed to a whiteness absolutely without a stain.

The house is as neat within as without; for such results are not seen but where harmony reigns supreme, and a congeniality of taste and purpose, and character, exists among all the partners in the firm. The kitchen, the dairy, the bed-rooms, the parlor, all exhibit the same neatness and order. The spinning-wheel, with its corded rolls upon its bench, keeps silence in the corner for a little while during the presence of the guest. The kitchen walls are hung round with the rich ornaments of their own industry—the long tresses and skeins of yarn, the substantial hosiery of the family, and the home-spun linen, emulating the whiteness of the snow-drift. The floors are carpeted, and the beds are made comfortable, with the produce of their own flocks and fields, all wrought by their own hands. The golden products of the dairy; the transparent sweets of the hive, obtained without robbery or murder; the abundant contributions of the poultry-yard, the garden, and the orchard, load the table with delicious luxuries. There are books for their leisure hours; and there are children trained in the good old school of respectful manners, where the words of age, and grey hairs, and superiority, still have a place; inured to early hours and habits of industry, and with a curiosity and thirst for knowledge, stimulated the more from a feeling of the restricted means of gratifying it. There is another delightful feature in the picture: the aged grandmother in her chair of state, with a countenance as mild and benignant as a summer evening's twilight; happy in the conviction of duty successfully discharged, by training her children in habits of temperance and industry; and receiving, as a kind of household deity, the cheerful tribute from all, of reverence and affection.

Some may call this poetry; it is indeed the true poetry of humble rural life, but there is no fiction nor embellishment about it. The picture is only true; and if it were not a violation of the rules which I have prescribed to myself, not to mention names in such cases, and that I might offend a modesty which I highly respect, I would show my readers the path which leads to the house, and they should look at the original for themselves.

The owner, when I visited him, was forty-five years old. At twenty-one years old, he was the possessor of only fourteen dollars, and of the blessing only of friends no richer than himself. His whole business has been farming, and that only. He married early; and though he did not get a fortune *with* a wife, he got a fortune *in* a wife. They have comforted and sustained their parents on one side of the house. They have brought up three children; and, with the colabour of the children, they have given them a substantial and useful education, so that each of them, now of sufficient age, is capable of keeping a good school, as they have done, with a view to assist their own education. He began with thirty-five acres of land, but has recently added fifty-five more to his farm, at an expense of nearly thirteen hundred dollars, for which there remained to be paid five hundred—a debt which, if health continued, he would be able to discharge in two years. The products of his farm are various. He raises some young stock; he fattens a considerable amount of pork for market, and occasionally a yoke of cattle. He sells, in a neighbouring village annually, about one hundred dollars worth of fruit, principally apples and peaches. Such a situation may be considered, in the best sense of the term, as independent as that of any man in the country.

Now what are the causes of such success? Persevering industry; the strictest and most absolute temperance; the most particular frugality, and always turning every thing to the best account; living within his own resources; and above all things, never in any case, suffering himself to contract a debt, excepting in the purchase of land, which could be made immediately productive, and where, of course, the perfect security for the debt could neither be used up, nor wasted, nor squandered.—*Colman's fourth Report on the Agriculture of Mass.*

A Horse's Foot.—The foot of the horse is one of the most ingenious and unexampled species of mechanism in animal structure. The hoof contains a series of vertical and thin laminæ of horn, so numerous as to amount to about 500, and forming a complete lining to it. In this are fitted as many laminæ belonging to the coffin bone; while both sets are elastic and adherent. The edge of a quire of paper inserted leaf by leaf into another, will convey a sufficient idea of the arrangement. Thus the weight of the animal is supported by as many elastic springs as there are laminæ in all the feet, amounting to about 4000; distributed in the most secure manner, since every spring is acted on in an oblique direction. Such is the contrivance for the safety of an animal, destined to carry greater weights than those of his own body, and to carry those also under the hazard of heavy shocks.—*Maculloch.*

For the Farmers' Cabinet.

Extraordinary Butter Cow.

To the Editor,—The following letter in relation to a very great yield of butter from one cow, I find in a late number of the American Agriculturist, and I was so much interested with it, that I send it for the Cabinet, supposing many of its readers may be as much surprised at the statement as myself. To believe that 65½ lbs. of butter of the best quality, may be obtained from an individual cow in three weeks, is a matter well worth recording: I confess it seems to me, like a pretty *long yarn*. The character, however, of the writer, is endorsed by the Agriculturist, as "one of the most respectable citizens of New York, and not at all likely to deceive either himself or others." The cow in question, is without horns, and is believed to be three-fourths Durham; she is about the ordinary size, of a red and white colour, "with a good spread of hip—a long head, low deep brisket—handles well," and has remarkably large milk veins. Can the vicinity of Philadelphia, equal the cow Emma? I acknowledge myself beat.

A Dairyman.

Montgomery co., Pa.

"The cow Emma, was nine years old last spring; I got her when a calf, from Mrs. Thomas Storm, at Kipp's bay. She was from a cow that she had called the cream breed. This is all the pedigree that I can give.

"I never, till the summer of 1842, kept her milk separate from three other cows which I have, and then, for experiment, I tried it only one week. She then gave 18 quarts per day, and her milk made 15 lbs. of butter. During this time she was kept on grass only. The past summer she received an injury in her spine, and in consequence of this, had barely the power to get up, and hardly lived through calving.

"On the 21st of May, I commenced keeping an account of her milk, and the butter it made. She at no time exeeded 16 quarts per day, and on the 10th of June, being 21 days, she had made 65½ lbs. of butter of the best quality. This was so incredible, that I could scarcely believe my own senses, although I weighed the butter at every churning myself. I thought I would try again for a day or two. I kept one day's milk by itself, 15½ quarts on the 15th of June, and churned it. All the milk was churned, as it appeared to be unnecessary to cream it. I had three pounds eight ounces of butter ready for the table. The next day it was also tried, and it produced three pounds four ounces. The first day above, the milk was put in two pans—the other day, only in one pan, which may have made the difference of the quarter of a pound.

"In September, she only gave 11 to 12 quarts per day, and made 10 lbs. of butter a week—further, I have not tried her milk. She was so lame during this time, as scarcely to be able to move. She was kept on good pasture, and besides this, I fed her night and morning, with a bushel of cut hay and eight quarts of shorts, which is still her regular feed. Peter H. Schenck."

Breeders' Convention.

About forty gentlemen met on Tuesday evening, at seven o'clock, October 17th, at the Repository of the American Institute, agreeably to the circular of the committee of the New York State Agricultural Society, of June last, to form a convention of breeders, to take into consideration the establishment of some fixed scale of points, which shall form the criteria of the best animals of the different breeds of domestic cattle.

The convention was organized, by appointing Mr. Bement, of Albany, chairman.

A motion was then offered and adopted, that the chairman nominate a committee of three, to select officers for the convention. The following gentlemen were appointed for this purpose:—Messrs. Prentice, of Albany, Watson, of Connecticut, and Randall, of Massachusetts, who reported—Dr. John A. Pool, of New Jersey, President, Jacob C. Parsons, of New York, Secretary. The above nominations were confirmed by the convention.

The convention being called to order by the president, the secretary was desired to read the circular, setting forth the object of the convention.* Mr. Prentice, of Albany, then offered a few remarks, stating the importance of a knowledge of the distinguishing points of excellence of the different breeds of cattle, He was followed by Mr. Watson, of Connecticut, on the same subject, advocating the great superiority of the Short-horn breed. He finished by reading a paper, detailing the points necessary to constitute a superior animal. Mr. Allen, of New York, then rose and spoke in general of the points necessary to constitute good animals of all kinds, and named these to be, 1st, a deep wide brisket; 2nd, a general fineness of bone, hair, skin, and small offal; 3d, good handling. He then mentioned several minor qualities, which he also consid-

* See page 382, last volume of the Cabinet, and page 69, of current volume.

ered essential. In size, he thought animals should differ in different sections of the country, according to the quantity of food to be furnished in the pastures, &c., and that the points constituting a good feeding animal, were essentially the same the world over; he did not care whether it was a horse, ox, sheep, pig, bird, or fish. Mr. Bement, of Albany, next followed, reading a paper containing his views on the subject in question, and pointing out emphatically the necessity of a standard in a detailed scale of points, in order to judge understandingly of the merits of cattle.

A resolution was now offered and adopted, that committees be appointed to report scales of points, which would constitute good animals of the various breeds. Messrs. Prentice, Bement, and Allen, were appointed the committee on Durhams; Messrs. Corning, Sotham and Pumpelly, on Herefords; Messrs. Allen and Colt, on Devons; Messrs. Randall and Watson, on Ayrshires; and Messrs. Jacques, Field, and Starr, on native cattle. The above committees were directed to report at the next meeting of the convention, which was adjourned to be held at the same place, at seven and a half o'clock, on Wednesday evening.

Wednesday, October 18th.—The convention being called to order by the president, the reports of the several committees were decided to be submitted. That on Devons, was first called for; but the committee declared themselves unprepared to report. Mr. Pumpelly then presented a report on behalf of the committee on Herefords, which was read, accepted, and reported to be placed on file. Mr. Randall now offered the report of the committee on Ayrshires, which was read, accepted, and ordered to be filed. Mr. Bement, on behalf of the committee on Short-horns, read the following report:—

After mature reflection and consultation, your committee do not feel prepared to make a report upon the scale of points which shall be considered as constituting a perfect animal; they therefore propose, that the subject be adjourned for consideration, till the next fall meeting of the New York State Agricultural Society, or of the American Institute. In coming to this conclusion, the committee hope that it will be no bar to any gentleman expressing his opinions on the subject in question, at the present meeting, trusting thereby, that a foundation may be laid for an *enlightened* discussion and decision next year.

C. N. Bement,
E. P. Prentice,
A. B. Allen,
Committee.

The above communication was received and ordered to be filed. The committee on native cattle, made no report. Mr. Sherwood, of England, then rose, and offered a few remarks on the necessity of adopting a scale of points for animals. Considerable informal conversation now took place, when the convention adjourned to meet at the same time with the New York State Agricultural Society, on the third Wednesday of January next.—*American Agriculturist.*

For the Farmers' Cabinet.

Floating Capital.

To the Editor,—I am an old man, and have seen many things in my day, from which I might doubtless have profited to much greater extent than I have done, if I had fortunately been more apt to learn. I have frequently seen it remarked in the columns of the Cabinet, that if farmers would undertake to manage no more land than they could make rich and cultivate well, they would be better off. Now I have long been convinced that this is a sound sentiment. I believe one of our great difficulties arises from the very circumstance of having too much land—of having so much capital invested in land, that we have none floating, a recourse to which would often give us great and decided advantages in the routine of our business. The farmer who buys upon credit, and is obliged to sell his produce at reduced prices, in order to meet his current expenses, may rely upon it, he will always operate unfavourably to himself. My own observations lead me to the conclusion, and they are confirmed by the views from time to time held out in the Cabinet, that every farmer ought to have some spare capital, of greater or less amount, in proportion to the size of his farm and the mode of its management. M. H.

Individual Example.—It is astonishing what an effect one individual will have upon a neighbourhood. I have sometimes seen a clever improving farmer settle down in a province of Bœtian darkness: at first he is looked upon with distrust, and even derision, if he is known to get an agricultural newspaper from the post office: but in a little while, the result of superior management becomes apparent, and one of two consequences ensues: his neighbours either begin to imitate him, or they remove their quarters.

It is utterly impossible that any man can continue to make one barrel alongside of another, who makes twelve to the acre; he must either yield or fly, and in this way it is, that one good example often reforms a neighbourhood.—*Southern Planter.*

From the American Farmer.

The Apple.

Owing to the deterioration of this fruit and the decay of many orchards in the neighbourhood of Baltimore, I have for some years, been paying particular attention to the subject, with a view to discover the causes, and if possible, a remedy by which this unfortunate state of things may be corrected, and the result of it will give you my own views upon the matter in question.

The greatest enemy the apple tree has in some districts of this country, is the *borer*—a white worm about an inch long, with a reddish head—this worm eats through the bark of the tree, at a point between the surface of the ground and where the roots start from the trunk; in a couple of seasons it will *girdle* a tree,—though it may be as large as twelve inches in diameter—and thereby cause its death.

To prevent the borer from attacking the apple tree, the following plan will prove efficacious. In setting out the young trees, plant them so shallow that the main roots as they branch from the trunk of the tree, may be seen *just above* the surface; the borer very rarely effects a lodgement in any tree that is planted in this shallow manner, as they almost invariably select that portion of the stem which is just below the surface of the ground, and immediately *above* the roots; preferring to work even from the commencement, entirely concealed.

To guard against the effects of drought the first season after planting, to which the roots being so near the surface, will be exposed, strew a few inches of leaves or strawy litter around the tree, a short distance beyond the extent of the roots. I was first led to notice, that shallow planting will secure the apple from the borer, from having two rows of young trees in a nursery, one of which had almost every tree perforated by this grub, while the other, though but three feet from the first, was entirely exempt from their visitations. On examining more closely, I found that the first row were set much deeper in the soil than the last; the latter, indeed, showing an inch of their roots above the surface, supposed to have been caused by the rains—as the two rows were on sloping ground—washing the soil from the shallow planted row, to that covered more deeply. Some months after making this discovery, an article was published in the Orchardists' Companion, from some gentleman in New Jersey, recommending shallow planting for the apple, as a preventive to the borer, thus confirming my views upon the subject.

If the trees are planted too deeply, remove the soil quite down to the upper roots, for the space of one foot or eighteen inches around the tree; be particular to keep the space thus made, always open.

The whale oil soap, so much praised at the North, I consider of great service to the apple tree, having tried it two seasons. It not only acts as a preventive to the borer, but adds to the general thriftiness of the tree, and gives the trunk a handsome and healthy appearance. This soap can be had in Baltimore, and ought to be applied from the middle to the end of April, every season; when the bark of the tree is rough, scrape it thoroughly previously to applying the soap.

Scoring or dividing the bark, by inserting the point of a knife in the upper part of the stem of the tree, and drawing it down to the bottom, is beneficial in preventing the tree from becoming bark bound.

Another cause of early decay and general unthriftiness, is produced by suffering grass crops to grow in the orchard, more than two or three seasons without breaking up the ground. I know a farmer in this county, who has an orchard of five or six acres, producing him a handsome income, the thriftiness of which he attributes entirely to his never letting the third season pass over, without ploughing and cultivating the ground in potatoes, corn, &c.

I have seen a remarkable instance of the effect of cultivation upon the growth of an orchard. In the neighbourhood of the city of Baltimore, an orchard was planted about thirteen years since, in land only of medium fertility. Ever since that period, the ground occupied by this orchard, has also been employed as a nursery or planted with some crop that required constant stirring and pulverization of the soil; such has been the effect, that these trees have been producing finely for the past six or seven years, and have attained an unusual size. Another orchard was planted nineteen years since, in strong ground, but which has ever since been occupied by grass, without any cultivation except spading a circle four feet in diameter, around each tree—and this omitted some seasons. In this orchard many of the trees have died, while those that remain will not average half the size of those planted six years *after them*, nor one third their productiveness.

As a general rule, after planting an orchard, keep the ground for the first eight or ten years, in some cultivated crop, and after that period, if grass crops are grown in it, three seasons at the most, should not pass over without putting the ground in potatoes,

or some crop that requires a thorough pulverization of the soil.

In proof of the advantages of cultivating the orchard, I may instance Captain Randall, who a short time since, received the premium of $50, from the Massachusetts Horticultural Society, as having the best orchard; he says, that "his orchard ground was every season occupied by crops of potatoes, rutabaga, or beets; in four years, some of the trees were thirteen inches in circumference, and he washed his trees every season with whale oil soap."

Mr. Phinney, another experienced Massachusetts farmer, says, "keep the ground in a high state of cultivation, let the crop that is planted be well manured and well cultivated, and the trees will require no other nourishment. M.

Baltimore co., September 11th, 1843.

For the Farmers' Cabinet.

Diseases of the Peach and Plum Tree.

Mr. Editor,—It is well known that peach trees formerly lived to a great age, and grew to a large size, while the land was new and plantations thinly scattered. In those times the insects and the diseases which now infest the tree and the fruit, were hardly known; and the only care the farmer had, was to beat off the fruit, to keep the tree from breaking down, by its abundance. A general decline of the peach tree commenced in this neighbourhood, I think about the year 1816, and for the last twenty years, but few trees have been reared. I think, however, we may still have this delicious fruit, by using the proper means to prevent the ravages of its enemies.

Where the *worm* is in the tree, cut them out in the spring, summer and autumn—return the earth again to the roots, and as a preventative, apply wood ashes, say half a peck to each tree. The application of urine is an excellent remedy. When the limbs are diseased, cut them off below the spot, and burn them. The *yellows* may be cured, by manuring the tree with rich hog-pen compost, or fresh horse dung, soap-suds, beef blood, and animal manures generally: urate and poudrette are better than any thing else. The *blistering* of the leaf, probably occasioned by cold, must be remedied by the application of warming and stimulating manures, to keep up a healthy circulation, till warm weather clothes the tree with a new foliage.

The enemy of the fruit of the peach and plum, is a small dark coloured bug, about the size of the pea bug, fortified with a hard shell, long bill, and a pair of forceps at the end to cut and probe the fruit, in order to provide a place to deposit its egg. The fruit thus injured, withers and generally falls when young—or if it attains a larger size, it ripens prematurely, and is of little worth. It is a good plan to turn the hogs among the trees; they eat the fallen fruit, and may thus cut off the progeny of another year. It is better still to kill the bugs as soon as they arrive to commit their mischief: this may be done by placing a sheet under the tree, and shaking it sufficiently to make them fall, when they may readily be detected on the sheet and destroyed. It is thus I manage my trees: my neighbours laugh at my proceedings, while I quietly feast on the fruit of my labour—sell to them, and enjoy a benefit from their unbelief.

James English.

Smith's Landing, Atlantic co., N. J.,
Nov. 26th, 1843.

Philosophy of Heat.—"Well, my little fellow," said a certain preceptor to a juvenile philosopher, whose mamma had been teasing the learned tutor to test the astonishing abilities of her boy, "What are the properties of heat?"

"The chief property of heat is, that it expands bodies, while cold contracts them."

"Very good, indeed: can you give me a familiar example?"

"Yes, sir; in summer, when it is hot, the day is long; while in winter, when it is cold, it becomes very short!"

"The learned preceptor stopped his examination, and was lost in amazement, that so familiar an instance should have so long escaped his own observation.—*English paper.*

Pine Apples have been successfully cultivated this season, near Savannah, Geo., by John Stoddard, Esq., who has a young plantation of them.—*South Western Farmer.*

THE FARMERS' CABINET,
AND
AMERICAN HERD-BOOK.

Philadelphia, Twelfth Month, 1843.

The Central New York Farmer says, that at the Worcester county Agricultural Society, in Massachusetts, the ploughing was done in good style. In the remarks of Col. R. M. Johnson, he alluded to the difference between the agriculture of Kentucky and Massachusetts, giving it as his opinion, that the former was many years behind the latter. The rough soil,

and the equally rough climate of New England, have driven its dense population not only to habits of close industry, but also to an economy in the use of means, which Kentucky has certainly only to practice, in order to find her own agriculture equal to that of her sister State. The Colonel said, that long before his fellow-citizens had thought him qualified to represent their interests in the councils of the nation, he had been accustomed to all the operations of the farm: in fact, at home he had thought himself a pretty good ploughman, able to turn as good a furrow as any of his neighbours; but since witnessing the ploughing match at Worcester, he concluded he had yet something to learn on the subject. He also congratulated the Society in having banished from the table all intoxicating drinks.

At the Cattle show, at Northampton, in an adjoining county, a pair of fat oxen were shown, weighing about 6,500 pounds. The weight of the fine steers, Duke of Gloucester, and Earl of Jersey, raised and fed a few years ago, by Edward Tonkin, near Woodbury, N. J., was about 6,100 pounds.

At the ploughing match at Northampton, seventeen teams of horses, and six of oxen, started in fine spirits for the trial.

Benjamin W. Cooper, an enterprising farmer of Camden, N. J., says, an effectual manuring for land, may be obtained for about 50 cents an acre, by paying that amount for a pound of turnip seed, and sowing it among corn. "I have reason to believe," says he, "that a crop of turnips when buried, leaf and root, will be found superior to almost any other that can be obtained, for the purpose of *ploughing in* as a green crop for manuring." At the proper season, it may be easily tried.

We keep on hand at this office, and will supply our friends with Agricultural works generally. Among which are

THE FARMER'S ENCYCLOPEDIA, full-bound in leather;—Price	$4 00
YOUATT ON THE HORSE, with J. S. Skinner's very valuable Additions;	2 00
THE AMERICAN POULTRY BOOK;	37½
THE FARMER'S LAND MEASURER;	37½
DANA'S MUCK MANUAL;	62½
Complete sets of the FARMER'S CABINET, half-bound, 7 vols.	5 75
LIEBIG'S FAMILIAR LETTERS;	12½

As well as his larger works on Chemistry and Agriculture—subscriptions will be received for Colman's Agricultural Tour in England and on the Continent. Books bound to order.

Our neighbours, the farmers of Bucks county, met at Newtown on the 4th ult., and adopted a Constitution, forming themselves into an Agricultural Society, Dr. Phinehas Jenks in the chair, and Edward M. Paxson, secretary.

☞ We would like our subscribers to remembert, hat every facility is offered for the transmission of the small sums due us, in the authority given by law to post-masters, to frank remittances to publishers. The Farmers' Cabinet owes much to the kindness and courtesy of post-masters in this matter, and it affords us pleasure, thus publicly to acknowledge it.

In the first number of our current volume, we referred to the manufacture of *wire rope*, and to its use in England and Saxony. We find an interesting communication on this subject, in the Rail-road Journal of last month, from John A. Roebling, of Saxonburg, Pa. He speaks of the difficulties hitherto encountered in the manufacture of wire ropes, and says, that his process differs from the English method, chiefly in the spiral laying of the wires around a common axis, *without twisting the fibres*, and in subjecting the individual wires, while thus laying, to a uniform and forcible tension, under all circumstances. Wire ropes of his make, from 3¼ to 4¼ inches in circumference, and 600 feet long, have been in successful use for two or three seasons, on the public works in the vicinities of Johnstown, Hallidaysburg, and Columbia. The manufacturer thinks his experience justifies him in asserting, that wire rope deserves the preference over hemp, in all situations that are much exposed, and where great strength and durability are required. Well manufactured iron rope, is said to be more pliable than that of hemp, of the same strength. While iron is gradually superseding wood in the construction of vessels, it would seem as if the standing rigging might also, ere long, be made of this apparently unyielding material. Wire rope may be spliced in the same manner as hemp; and destruction from oxydation may be prevented, by the application of a varnish during the manufacture, and an occasional oiling or tarring, while in use.

New Jersey Veal.—We saw on the shambles of Charles Barnholt, jr., in Market street, just below Eleventh, on the 2nd inst., as fine a lot of veal as has perhaps, been at any time exhibited in our market. In the slaughtering and preparation, it appeared to have the advantage of every thing that the hand of a master workman could do for it. The calves were from three to six months old, and were fed in Springfield, Burlington county, N. J., by

Charles Earle,	live weight,	676 lbs.	dressed,	448 lbs.
W. Black,	do.	589	do.	350
C. Ewen,	do.	541	do.	331
F. Earle,	do.	516	do.	330
C. Lippincott,	do.	495	do.	294
D. D. Smith,	do.	485	do.	313
—— Earle,	do.	409	do.	248
T. Newbold,	do.	327	do.	192
D. D. Smith,	do.	280	do.	166

We are not informed whether they came from cows of a particular breed, or from our native stock. Some of our best veal is sent to us from Springfield.

A box of superior, improved *Yeast Powders*, prepared by T. P. James, Druggist, S. W. corner of Fourth and Wood streets, having been handed over to those who preside in such matters, they have been pronounced an excellent article in the making of all kinds of batter cakes. At this season of buckwheat cakes, among which heaviness, and sourness, are any thing but desirable ingredients, these powders will be found a very valuable addition to the conveniences of the kitchen.

JAMAICA:—Its Past and Present State;—by James M. Phillippo. Just published by James M. Campbell & Co., 98 Chesnut street, in this city; and Saxton & Miles, 205 Broadway, New York.

The iron steamer, Great Britain, now being built at Bristol, England, is 308 feet long and 50 wide, and measuring from the figure-head to the tafferell, 322 feet. Her grand saloon aft, is 98 feet by 32, and 8½ high. The boiler will be heated by 24 fires; and the vessel, driven by a propeller somewhat upon the principle of the screw, will be operated upon by four engines, each of 250 horse power, and the force of 1000 horses, will urge her to her point of destination. She will consume about 64 tons of coal per day:—to provide her then, for a voyage of twenty days, would require nearly 1,300 tons. She is expected, however, to make her way, puffing and blowing, across the Atlantic, in ten or eleven days. About 1,500 tons of iron will be used in her construction, and her cost will probably be £100,000.

The Southern Cultivator, published at Augusta, Ga., every fortnight, at one dollar a year, by J. W. and W. S. Jones, is one of the neatest agricultural papers we are in the receipt of, and is eminently calculated to be useful. In a late number, which is near the close of the first volume, a sensible, manly appeal, which we hope will prove an efficient one, is made to the planters of the South, and to all the friends of agriculture, to assist in giving such a circulation to the paper, as will enable it to sustain itself, and its publishers to continue their efforts in behalf of the great agricultural interests of that section of the country.

The farmers of Salem county, N. J., met at Salem on the 18th ult., and formed an Agricultural Society, by the adoption of a Constitution, and the election of officers for the management of its concerns. James Newell, was chosen president; Paul Scull, Wm. F. Reeve, and Joseph Black, vice-presidents: Samuel Abbott, recording secretary; J. M. Hannah, corresponding secretary; and Smal. P. Carpenter, treasurer. From the character and thorough farming habits of the men who are active in this measure, we anticipate a still further impetus to what may already be called the good farming of Salem county. With a soil abundantly prolific—lying on the Delaware, and its tide-water creeks bringing the advantages of navigation to the foot of almost every farm, this county is perhaps second to none in the State, in the amount of its agricultural prosperity and wealth. It possesses too, in the extensive beds of green-sand marl, in the vicinity of Woodstown, a mine that is better than one of gold; for while it enriches for many miles around, all who dig for its treasures, it does not enervate them, but on the contrary, urges them on to continued industry and toil.

Our friend A. W. Townsend, whose letter appears on page 154, and who forwarded a couple of the ears of his *Calico corn*, accompanied by a handsome sample of flour made from it, informs us, that it was latterly brought from the Oregon Territory, aud he values it highly.

The editor of the Southern Planter, Richmond, Va., will accept our thanks for the copy of his Address before the Henrico Agricultural Society, delivered on the 1st ult. We have been much gratified in its perusal, and have marked some paragraphs for insertion in a future number.

We are indebted also to B. P. Johnson, President of the Oneida county Agricultural Society, for his Address delivered before it, at Rome, N. Y., on the 5th of Tenth month last. It is really very gratifying to notice the evidences all through our country, of increasing interest in the promotion of agricultural improvements. From the North and the South—from the East and the West, these evidences come to us almost daily. It is always cheering to see difficulties overcome, and the strong energies of the farmer and mechanic brought into action, in proportion as circumstances are apparently unfavourable. The president acknowledges that his own State is indebted to Massachusetts for almost every superior implement of husbandry; and that the agricultural products of the latter State, upon a soil far less fertile, and less favourable for cultivation than New York, are such as to require the most improved and efficient system of husbandry, on the part of New York to equal her.

Liebig's Familiar Letters on Agriculture, Chemistry, &c., were noticed in the last number of the Cabinet, as published by George S. Appleton, of this city. We have lately received a copy of the same work, published by James M. Campbell & Co., 98 Chesnut street, in uniform style with their editions of Agricultural and Animal Chemistry, by the same author. The price of this also, is only 12½ cents, and may be read to advantage by every one who holds the plough.

THE ENCYCLOPEDIA OF CHEMISTRY, is now publishing monthly, by Carey & Hart, at 25 cents a number. The second number of this valuable work, by James C. Booth and M H. Boyé, has been placed upon our table. It is handsomely got up, and, as its title imports, will embrace the whole range of chemical science, and be enriched with all its latest discoveries.

We have received a letter from Wm. M. Paul, of Milton, Wayne county, Indiana, in which he speaks highly of a plough, called the "Universal Corn Plough, or Cultivator," the castings of which may be so regulated as to turn two furrows at once: for instance, supposing the rows of corn or potatoes, &c., to be three, or four, or five feet apart, as the case may be, a furrow may be thrown to each of two rows at the same time; and by properly adjusting the castings, the middle, left after the first furrows have been turned, may be readily divided. The cost is about $8; and patent rights are for sale. The writer, who is originally from the East, is of the opinion, that unless material improvements have been latterly introduced into our mode of constructing our ploughs for working among corn, this will be found superior to any we have. It is of course, impossible for the editor to form an opinion of the merits of the plough in question, and he will express none. The use of the Cultivator with five teeth or hoes, and Prouty & Beach's small ploughs, really seem so complete, that it must be a very superior article that shall drive them out of the corn-field.

WHOLESALE & RETAIL SEED & IMPLEMENT WAREHOUSE.

Constantly for sale, Corn Shellers of every variety, for hand or horse power; Straw and Corn-stalk Cutters, of different patterns, from $5 to $30 each. Grain Fans, of various kinds, from $8 to $30 each;—Corn Crackers, Sausage Cutters, Sausage Stuffers, Apple Parers, Churns on a new plan, which are cheap and good;—Self-sharpening Premium Ploughs;—Subsoil Ploughs; Agricultural Furnaces; Cooking Stoves, &c., for sale low, by D. O. PROUTY,

No. 176, Market street, above Fifth, Philad.

Agricultural Implement Manufactory,

No. 196, Market street, two doors above Sixth street, and two doors below the Red Lion Hotel:

Where are manufactured and for sale, lower than can be purchased elsewhere, Horse Powers and Threshing Machines, Fanning Mills, Corn Shellers, Straw and Hay Cutters, Horse Rakes, Ploughs, Harrows, Cultivators, Seed Planters, Cheese Presses, Churns, Pumps, and every kind of farming implement generally in use. Also, Beach's Self-sharpening Plough and castings—and Wiley's two-pointed do. Every description of implement made to order, or repaired by experienced workmen, and warranted. Slater's Patent Corn Sheller and Grinder. EDWIN CHANDLER,

Agent for Agricultural Machines of every description.

POUDRETTE.

The manufacture of this article having now got fairly under way in Philadelphia, we shall have it constantly on hand, and for sale at the office of the Farmers' Cabinet; the price at present, is $1 50 cts. per barrel, containing four bushels; or seven barrels for ten dollars—or thirty cents a bushel, at the manufactory. Orders from a distance, enclosing the cash, with cost of porterage, will be promptly attended to, by carefully delivering the barrels on board of such conveyance as may be designated. Farmers to the South, and in the interior, both of this State and New Jersey, are invited to try the article. It has been used to great advantage as a top-dressing on wheat in the spring. For corn in the hills, and for vegetables generally, there is perhaps nothing superior to the Poudrette. Truck growers in New Jersey, and elsewhere, whose interest it is, to have their vegetables, melons, &c., early in the market, will find this manure of great importance.

☞ SHORT ADVERTISEMENTS, ☜

The subject matter of which, may correspond with the agricultural character of this paper, will be inserted at the rate of one dollar for each insertion of ten lines or less; and so in proportion for each additional line. The money to be paid in advance.

The quantity of rain which fell during the Eleventh month, (November,) 1843, was nearly four inches and a quarter. ..... 4.148 inches.

Penn. Hospital, 12th mo. 1st.

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THE FARMERS' CABINET,

IS PUBLISHED MONTHLY BY

JOSIAH TATUM, No. 50 NORTH FOURTH STREET, PHILADELPHIA.

It is issued on the fifteenth of every month, in numbers of 32 octavo pages each. The subjects will be illustrated by engravings, when they can be appropriately introduced.

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Joseph Rakestraw, Printer.